



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
1417
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

RECOMMENDATION

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		PC0078402	PC0081593	PC0077852
Sample Date		Client Info		22 May 2024	22 Feb 2024	29 Nov 2023
Machine Age	kms	Client Info		617009	602390	588696
Oil Age	kms	Client Info		14619	13694	28838
Filter Age	kms	Client Info		14619	13694	28838
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	38	36	▲ 100
Chromium	ppm	ASTM D5185(m)	>20	1	2	5
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	6
Lead	ppm	ASTM D5185(m)	>40	4	2	2
Copper	ppm	ASTM D5185(m)	>330	10	5	10
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	---	NONE

CONTAMINATION

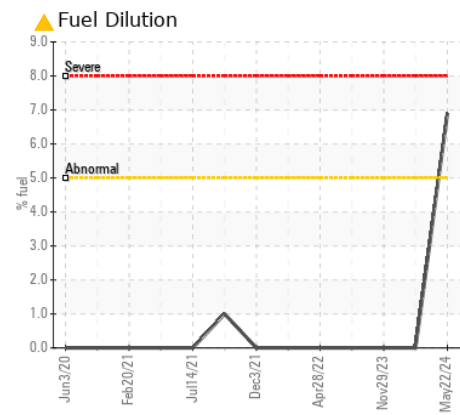
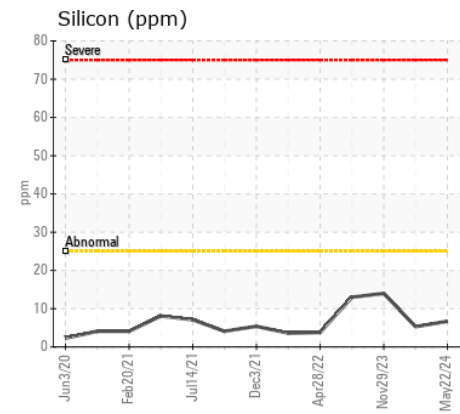
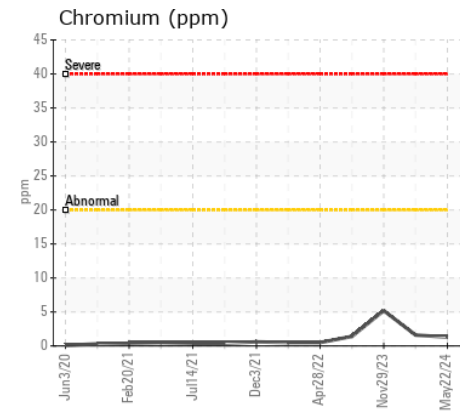
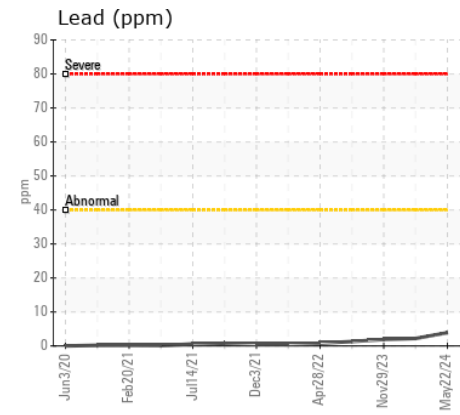
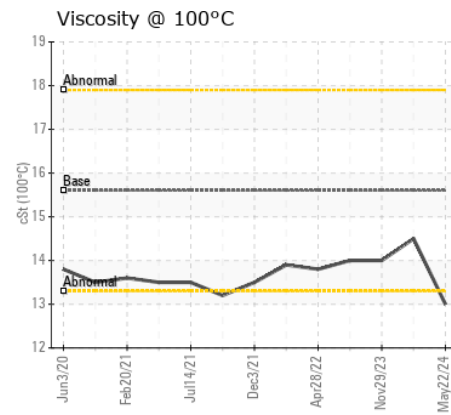
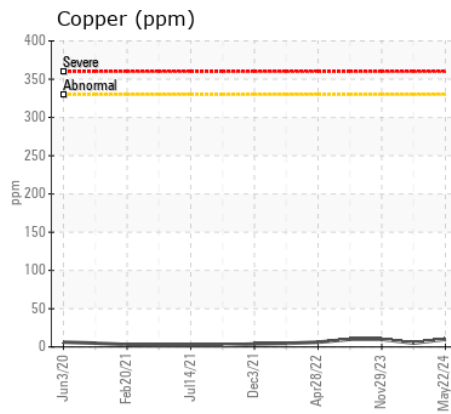
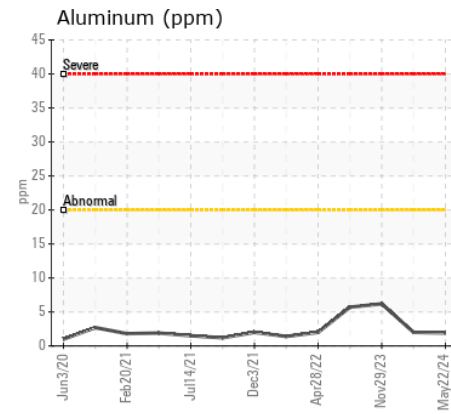
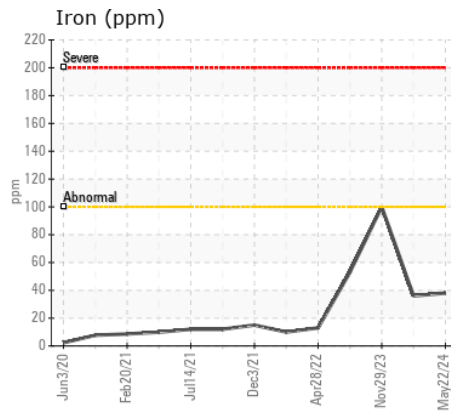
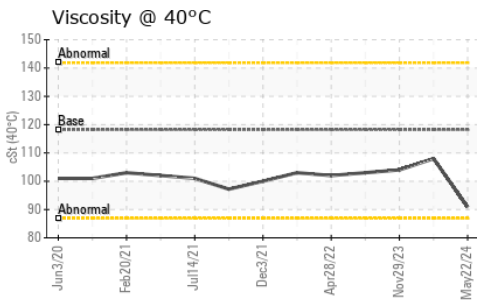
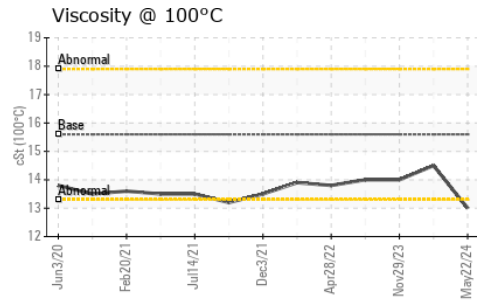
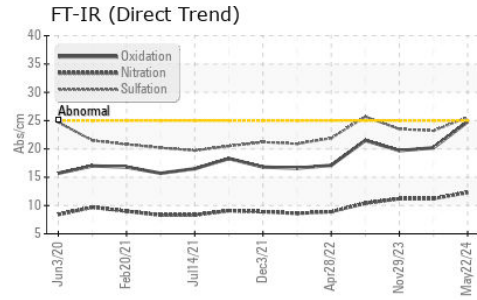
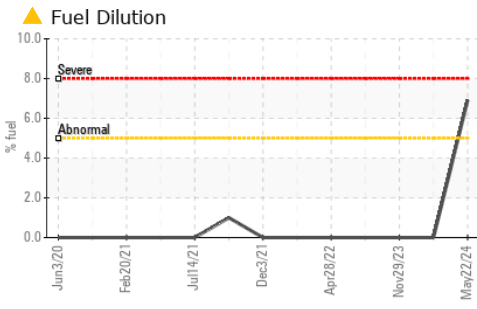
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	5	14
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	3
Fuel	%	ASTM D7593*	>5	▲ 6.9	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0.4	0.4	0.4
Nitration	Abs/cm	ASTM D7624*	>20	12.3	11.2	11.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.6	23.2	23.5
Silt	scalar	Visual*	NONE	VLITE	---	NONE
Debris	scalar	Visual*	NONE	NONE	---	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	---	NONE
Appearance	scalar	Visual*	NORML	NORML	---	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		19	60	● 310
Boron	ppm	ASTM D5185(m)	0	2	3	6
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	67	68	73
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	1067	1082	995
Calcium	ppm	ASTM D5185(m)	1070	1189	1250	1269
Phosphorus	ppm	ASTM D5185(m)	1150	1095	1056	1032
Zinc	ppm	ASTM D5185(m)	1270	1312	1332	1319
Sulfur	ppm	ASTM D5185(m)	2060	2358	2519	2508
Oxidation	Abs/.1mm	ASTM D7414*	>25	24.8	20.2	19.7
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	90.9	108	104
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.0	14.5	14.0
Viscosity Index (VI)	Scale	ASTM D2270*	139	141	137	136



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078402
Lab Number : 02639822
Unique Number : 5788984
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual)

Received : 05 Jun 2024
Tested : 07 Jun 2024
Diagnosed : 07 Jun 2024 - Wes Davis

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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