



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1419
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0080277	PC0062042	PC0018598
Sample Date		Client Info		09 Jan 2024	31 Aug 2023	18 Jul 2023
Machine Age	kms	Client Info		608558	604207	597069
Oil Age	kms	Client Info		11380	604207	12148
Filter Age	kms	Client Info		11380	604207	12148
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	SEVERE	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	9	30	30
Chromium	ppm	ASTM D5185(m)	>20	<1	0	1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	5	5	3
Lead	ppm	ASTM D5185(m)	>40	<1	<1	1
Copper	ppm	ASTM D5185(m)	>330	2	5	5
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

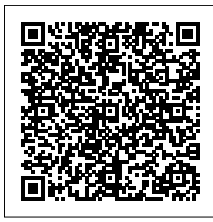
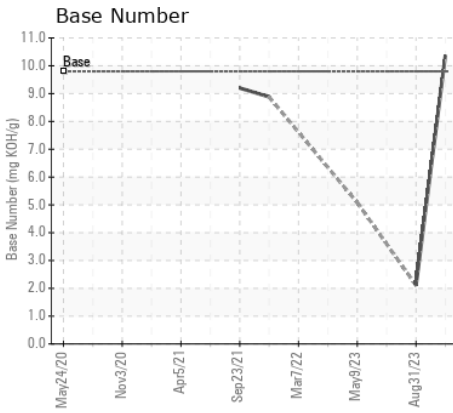
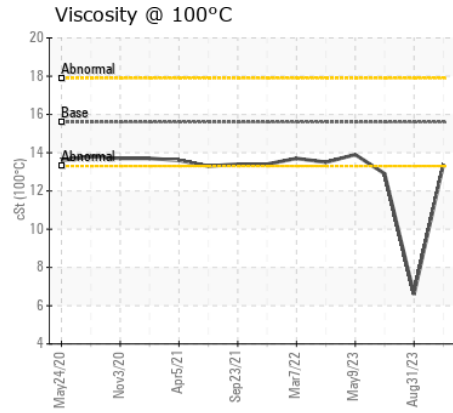
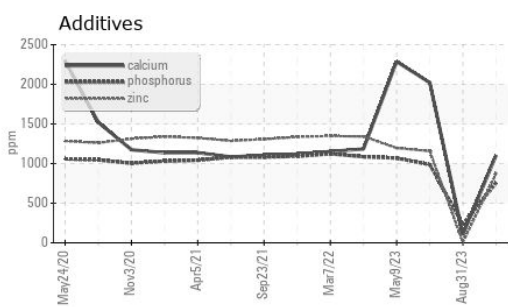
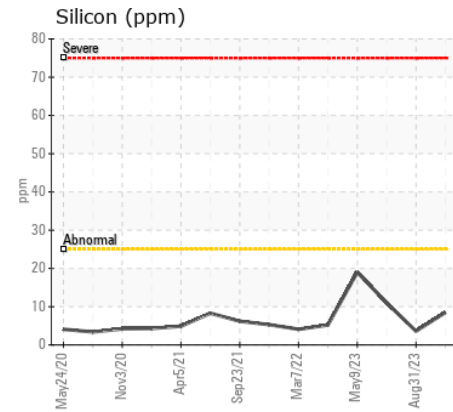
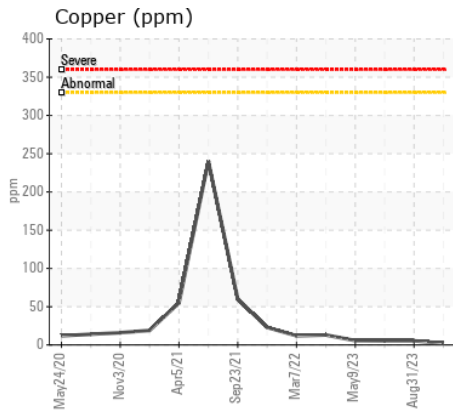
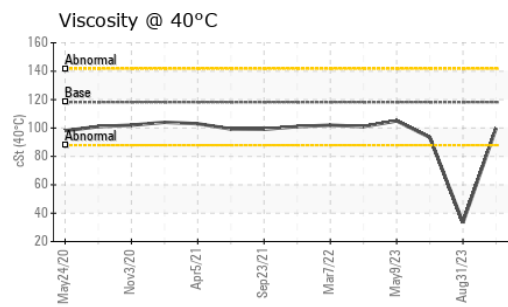
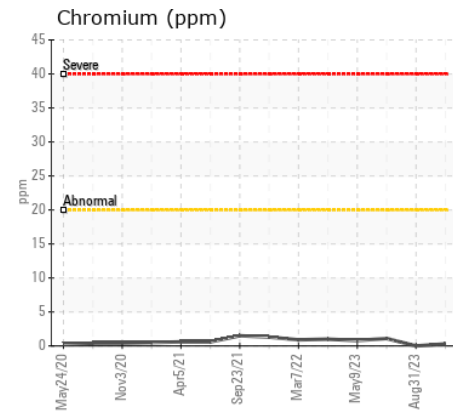
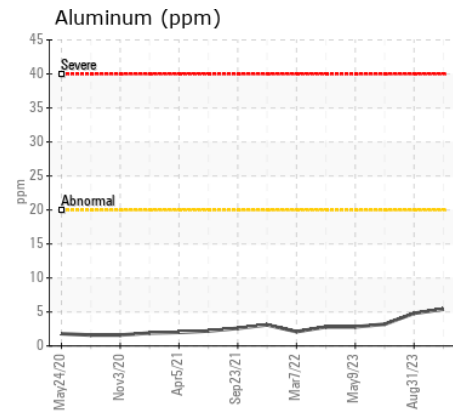
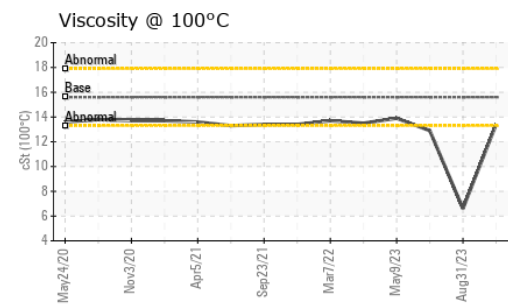
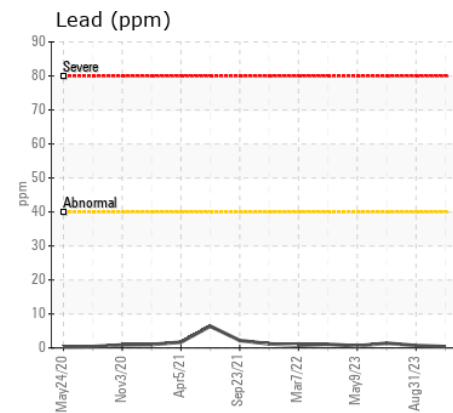
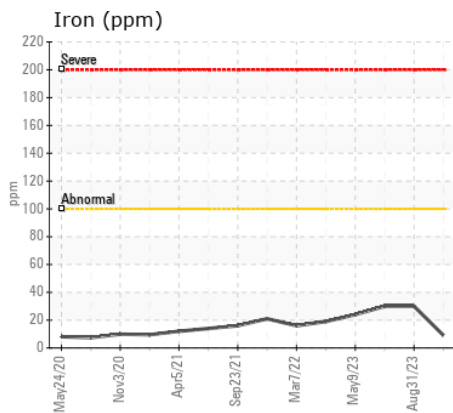
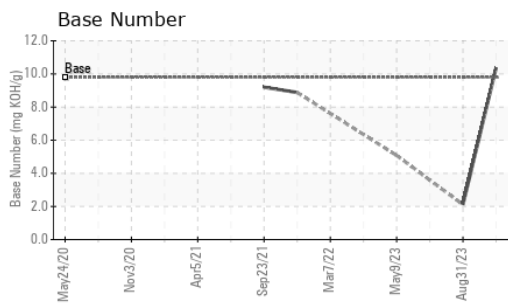
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	4	11
Potassium	ppm	ASTM D5185(m)	>20	<1	1	7
Fuel		WC Method	>5	<1.0	▲ 3.1	▲ 4.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0.7
Nitration	Abs/cm	ASTM D7624*	>20	6.8	5.7	10.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.2	▲ 30.3	24.1
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		5	5	10
Boron	ppm	ASTM D5185(m)	0	22	▲ 63	46
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	47	▲ <1	9
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	803	▲ 3	118
Calcium	ppm	ASTM D5185(m)	1070	1104	▲ 102	2021
Phosphorus	ppm	ASTM D5185(m)	1150	756	▲ 229	987
Zinc	ppm	ASTM D5185(m)	1270	872	▲ 8	1157
Sulfur	ppm	ASTM D5185(m)	2060	2128	1811	2682
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7	▲ 40.2	19.0
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	10.37	◆ 2.11	---
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	99.8	▲ 33.4	93.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.4	▲ 6.6	12.9
Viscosity Index (VI)	Scale	ASTM D2270*	139	133	157	135



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080277 **Received** : 10 Jan 2024
Lab Number : 02607718 **Diagnosed** : 11 Jan 2024
Unique Number : 5708804 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: KV40, VI)

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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.