



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DR168
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON UHP 5W40 (41 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0082686	PC0078251	PC0056647
Sample Date		Client Info		27 Mar 2024	05 Aug 2023	10 Nov 2022
Machine Age	hrs	Client Info		14872	14220	1398
Oil Age	hrs	Client Info		0	250	0
Filter Age	hrs	Client Info		0	250	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	6	54	23
Chromium	ppm	ASTM D5185(m)	>20	0	1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	12	9
Lead	ppm	ASTM D5185(m)	>40	0	3	1
Copper	ppm	ASTM D5185(m)	>330	<1	77	14
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

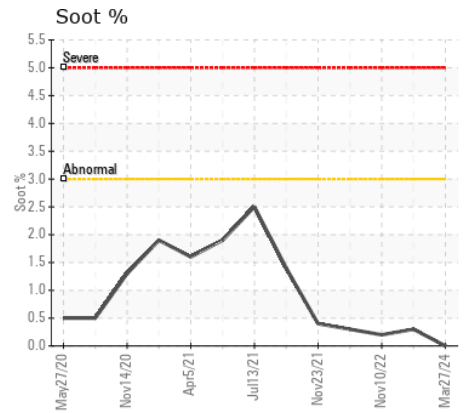
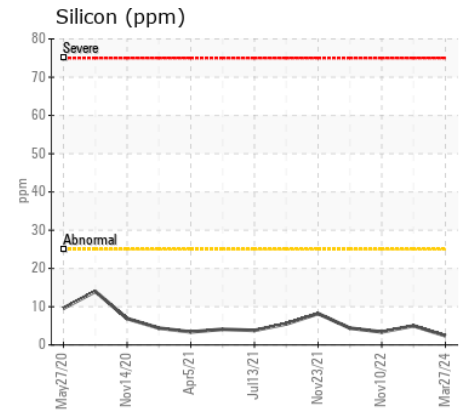
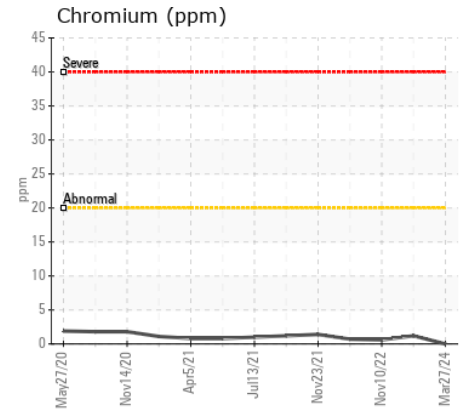
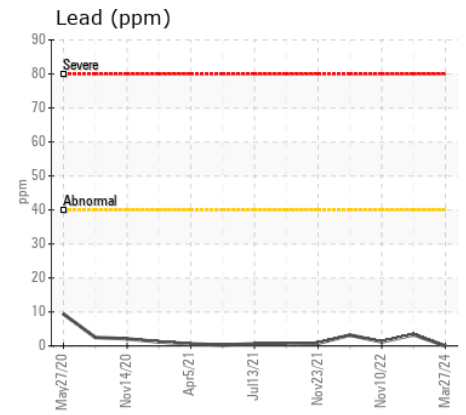
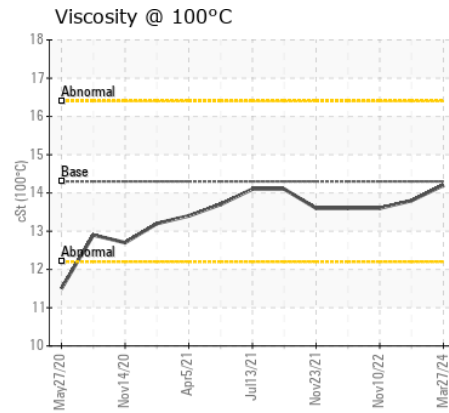
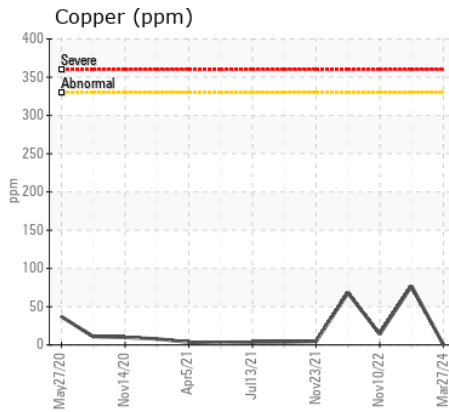
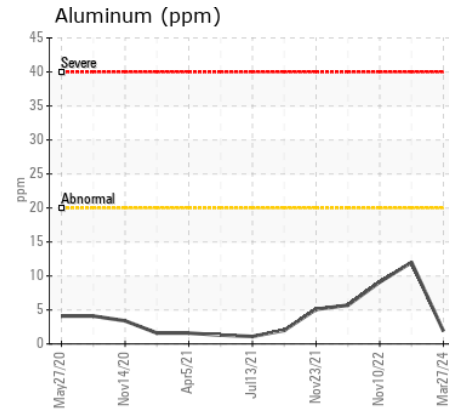
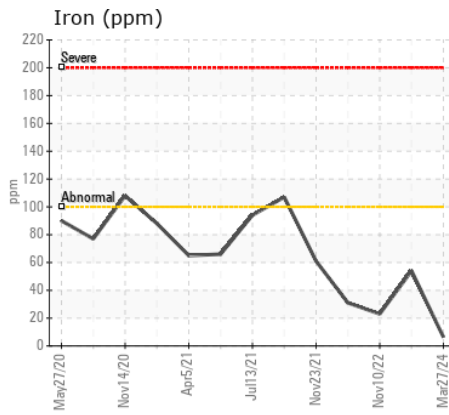
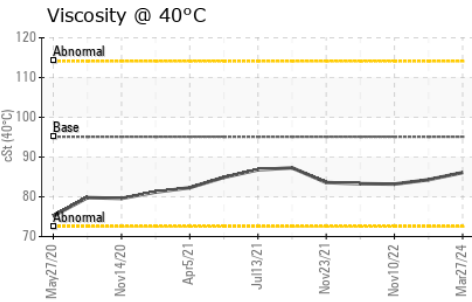
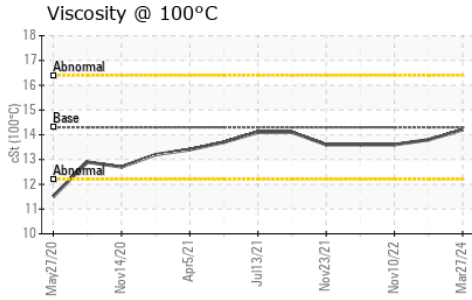
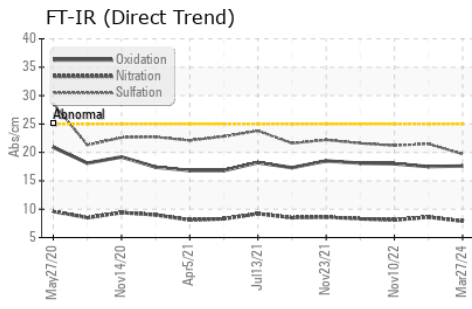
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	5	3
Potassium	ppm	ASTM D5185(m)	>20	<1	29	17
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	7.9	8.6	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7	21.5	21.2
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)		4	9	6
Boron	ppm	ASTM D5185(m)	65	45	44	39
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	54	57	57
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	1073	1067	1053
Calcium	ppm	ASTM D5185(m)	820	803	791	823
Phosphorus	ppm	ASTM D5185(m)	1160	934	1036	1041
Zinc	ppm	ASTM D5185(m)	1260	1153	1140	1153
Sulfur	ppm	ASTM D5185(m)	3000	2594	2704	2789
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.6	17.5	18.0
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	86.1	84.3	83.2
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	14.2	13.8	13.6
Viscosity Index (VI)	Scale	ASTM D2270*	169	171	168	167



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082686
Lab Number : 02627830
Unique Number : 5760962
Test Package : MOB 1 (Additional Tests: KV40, VI)

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
 151 Ram Forest Rd,
 Stouffville, ON
 CA L4A 2G8
 Contact: Shannon Abbott
 sabbott@gipi.com
 T: (905)750-5900
 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.