



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
OR919
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (13 LTR)

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		PC0078319	PC0075750	PC0052356
Sample Date		Client Info		16 Feb 2024	25 Apr 2023	04 Apr 2022
Machine Age	hrs	Client Info		7663	7215	4325
Oil Age	hrs	Client Info		0	500	500
Filter Age	hrs	Client Info		0	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	10	11	20
Chromium	ppm	ASTM D5185(m)	>20	3	3	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	4	3	4
Lead	ppm	ASTM D5185(m)	>40	<1	0	<1
Copper	ppm	ASTM D5185(m)	>330	2	1	2
Tin	ppm	ASTM D5185(m)	>15	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

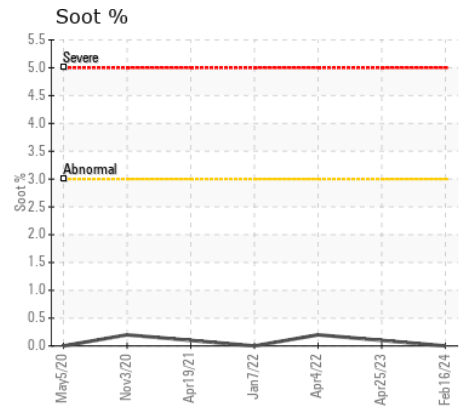
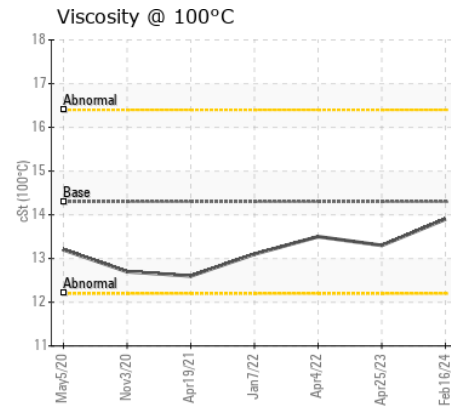
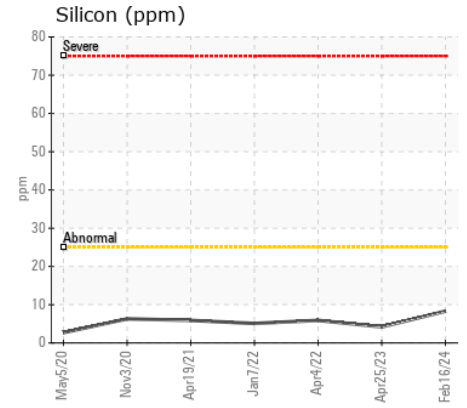
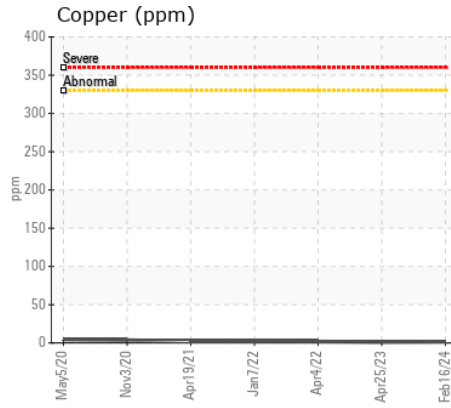
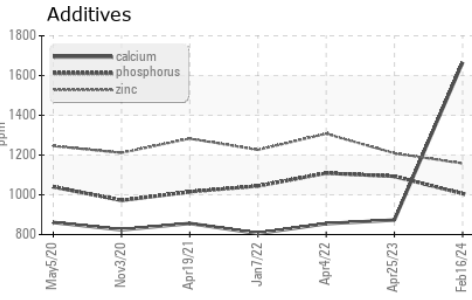
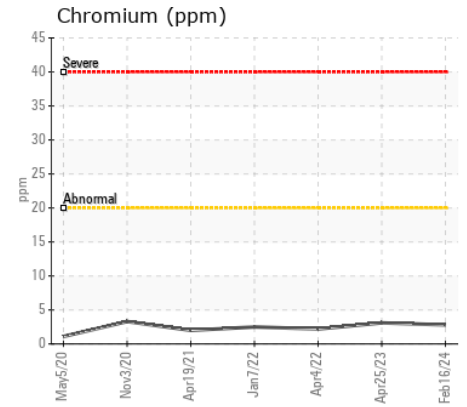
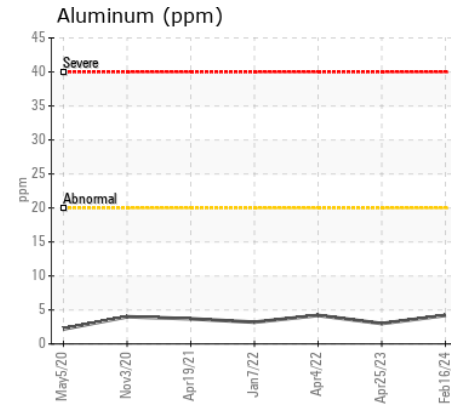
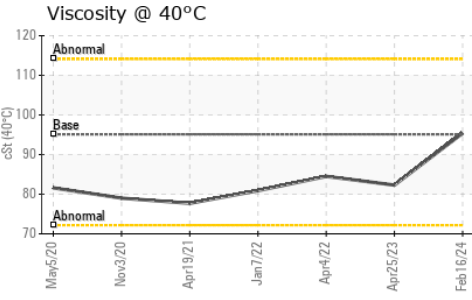
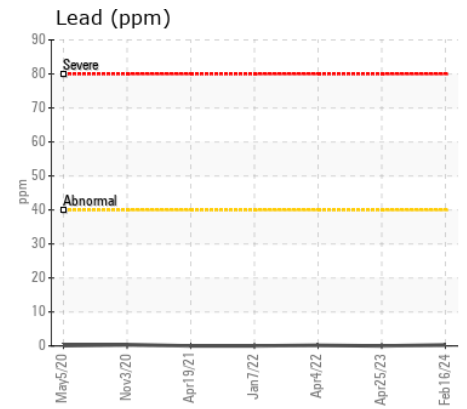
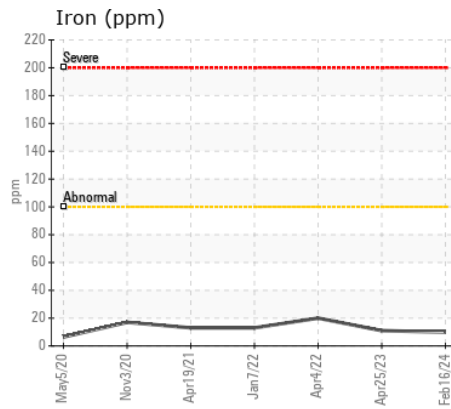
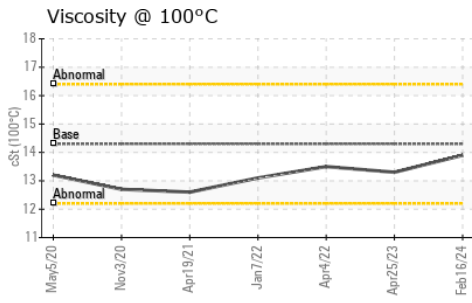
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	4	6
Potassium	ppm	ASTM D5185(m)	>20	5	0	<1
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	0.1	0.2
Nitration	Abs/cm	ASTM D7624*	>20	8.7	11.9	12.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.7	21.5	23.8
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	5	4
Boron	ppm	ASTM D5185(m)	65	119	44	45
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	26	59	61
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	470	1124	1217
Calcium	ppm	ASTM D5185(m)	820	1666	873	855
Phosphorus	ppm	ASTM D5185(m)	1160	1006	1093	1109
Zinc	ppm	ASTM D5185(m)	1260	1158	1209	1307
Sulfur	ppm	ASTM D5185(m)	3000	3035	2827	2787
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.3	23.6	23.7
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	95.4	82.3	84.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	13.9	13.3	13.5
Viscosity Index (VI)	Scale	ASTM D2270*	169	148	163	162



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078319 **Received** : 22 Feb 2024
Lab Number : 02617401 **Tested** : 22 Feb 2024
Unique Number : 5734511 **Diagnosed** : 22 Feb 2024 - Wes Davis
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: Bill Acton
 bacton@gipi.com

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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