

Machine Id
DR191
Component
Diesel Engine
Fluid
PETRO CANADA SUPREME SYNTHETIC 5W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0078050	PC0075763	PC0048356
Sample Date		Client Info		25 Aug 2023	17 Jun 2023	04 May 2023
Machine Age	hrs	Client Info		1422	1170	0
Oil Age	hrs	Client Info		250	250	0
Filter Age	hrs	Client Info		250	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	7	8	7
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	3
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	1	1	1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

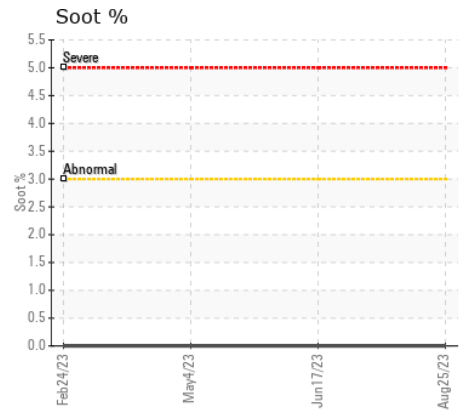
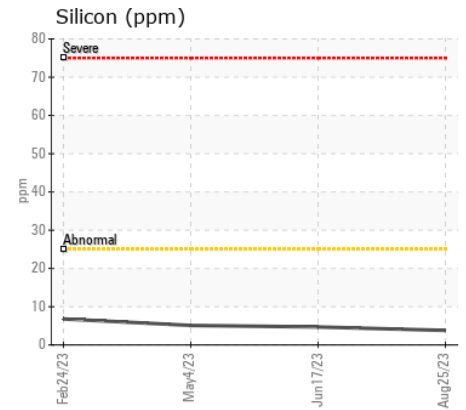
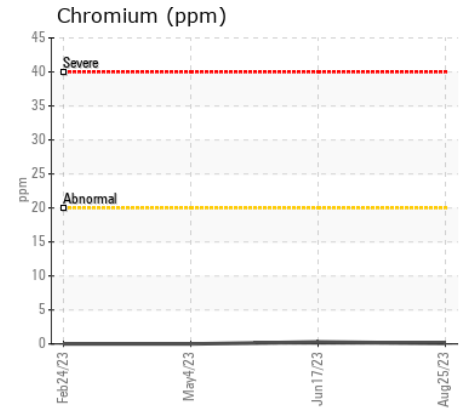
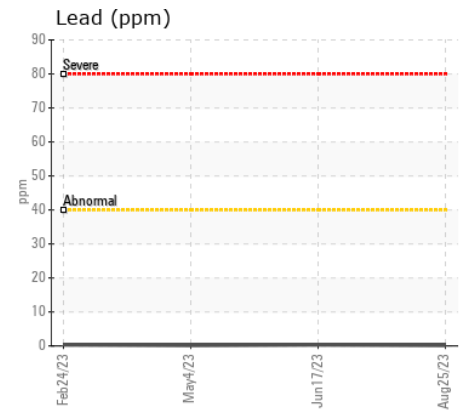
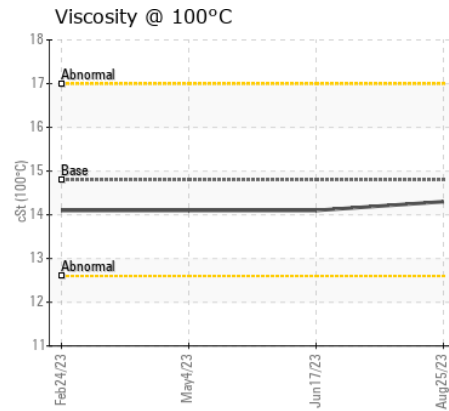
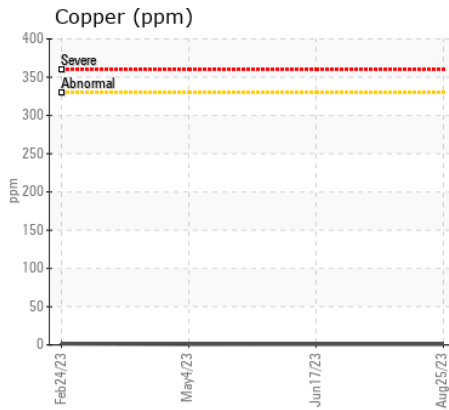
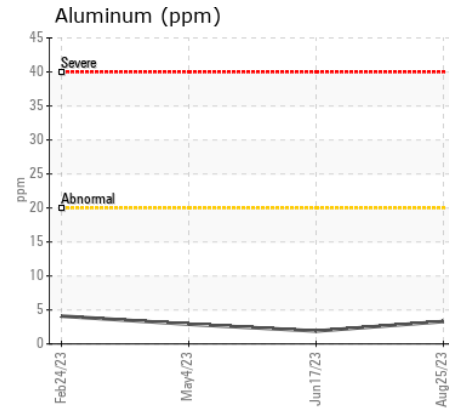
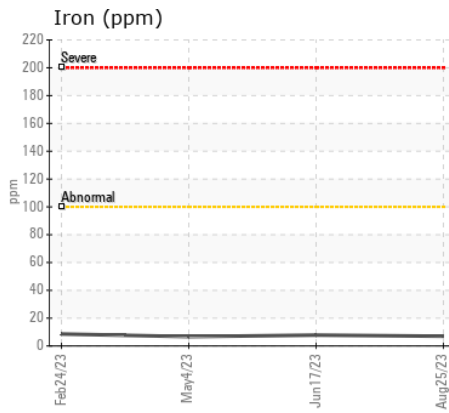
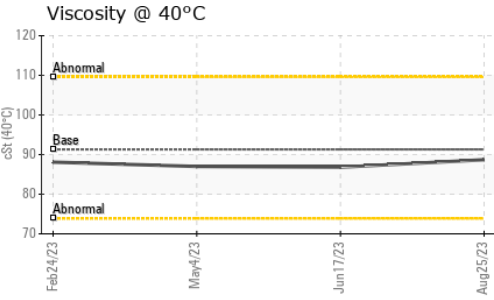
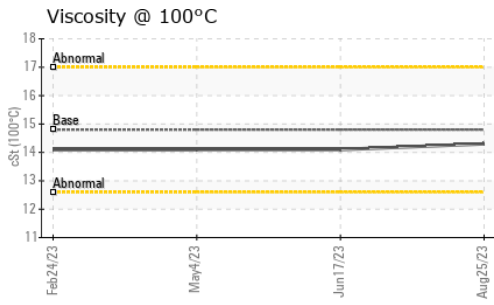
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	5	5
Potassium	ppm	ASTM D5185(m)	>20	7	4	7
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	0
Nitration	Abs/cm	ASTM D7624*	>20	8.9	8.6	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	20.9	20.5
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	4
Boron	ppm	ASTM D5185(m)	190	26	30	39
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	79	57	59	61
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	564	1050	1091	1098
Calcium	ppm	ASTM D5185(m)	993	802	826	845
Phosphorus	ppm	ASTM D5185(m)	763	943	1009	1063
Zinc	ppm	ASTM D5185(m)	835	1127	1167	1158
Sulfur	ppm	ASTM D5185(m)	2536	2728	2736	2871
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.8	19.0	18.5
Visc @ 40°C	cSt	ASTM D7279(m)	91.3	88.7	86.8	87.0
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	14.3	14.1	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	170	167	167	167



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GPI) - 286 - Shoring & Foundations
Sample No. : PC0078050 **Received** : 10 Jan 2024 151 Ram Forest Rd,
Lab Number : 02607730 **Diagnosed** : 11 Jan 2024 Stouffville, ON
Unique Number : 5708816 **Diagnostician** : Wes Davis CA L4A 2G8
Test Package : MOB 1 (Additional Tests: KV40, VI) Contact: Shannon Abbott
 sabbott@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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