

Machine Id
FL0210

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W40 (9 LTR)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0078555	PC0071547	PC0065345
Sample Date	Client Info			24 Jul 2023	01 Feb 2023	30 Sep 2022
Machine Age	hrs	Client Info		0	6100	5555
Oil Age	hrs	Client Info		0	500	500
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	10	9	36
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		<1	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	2	2
Lead	ppm	ASTM D5185(m)	>40	<1	<1	2
Copper	ppm	ASTM D5185(m)	>330	16	16	99
Tin	ppm	ASTM D5185(m)	>15	<1	<1	2
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

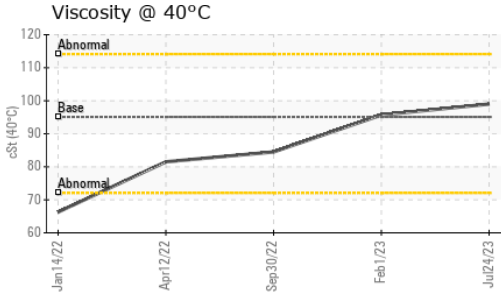
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	65	344	364	29
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	79	81	58
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	459	487	980
Calcium	ppm	ASTM D5185(m)	820	1311	1344	927
Phosphorus	ppm	ASTM D5185(m)	1160	1048	1114	1031
Zinc	ppm	ASTM D5185(m)	1260	1158	1176	1153
Sulfur	ppm	ASTM D5185(m)	3000	2721	2860	2572
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5	4	5
Sodium	ppm	ASTM D5185(m)		2	2	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.2	0.2	1
Nitration	Abs/cm	ASTM D7624*	>20	5.1	6.0	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	23.0	22.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.8	14.5	19.0

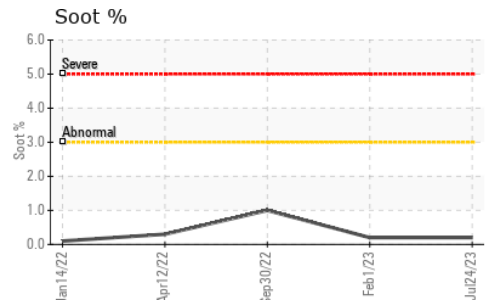
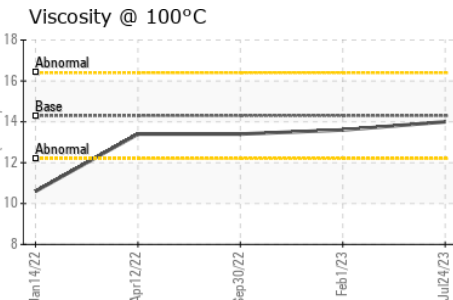
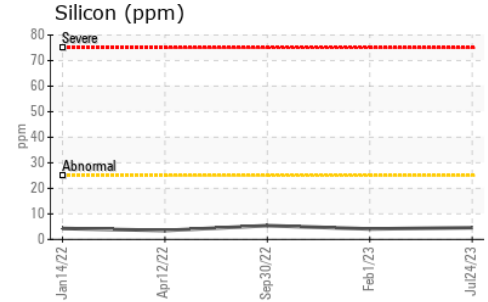
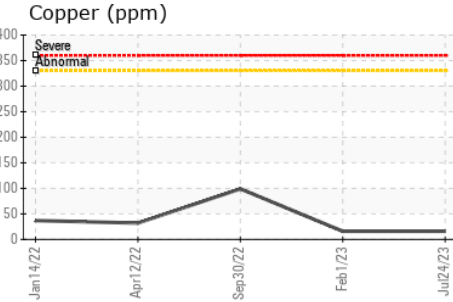
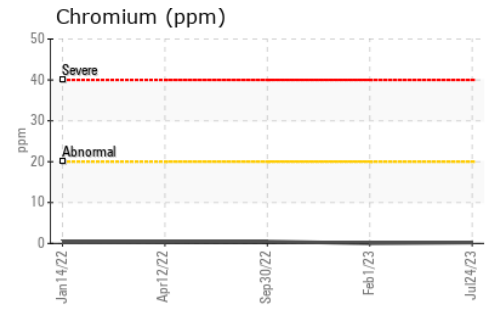
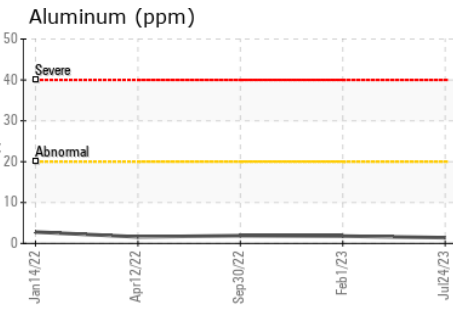
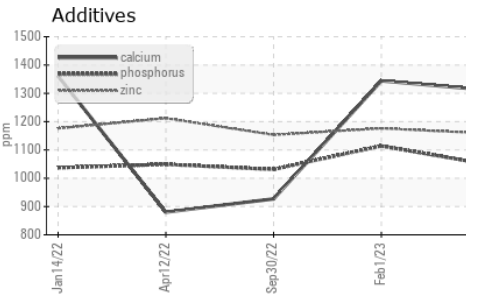
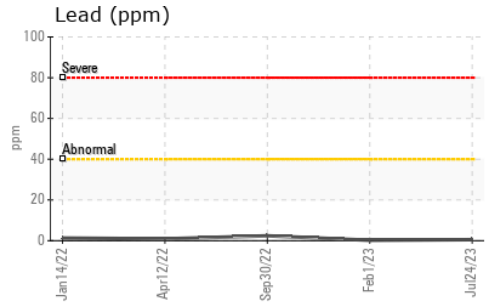
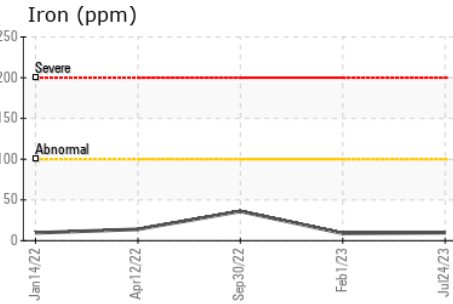
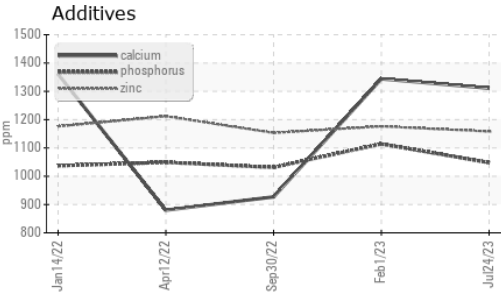
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	95.7	84.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	13.6	13.4
Viscosity Index (VI)	Scale	ASTM D2270*	169	143	160

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
Sample No. : PC0078555 **Received** : 25 Jul 2023
Lab Number : 02571871 **Diagnosed** : 25 Jul 2023
Unique Number : 5616922 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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.

151 Ram Forest Rd,
 Stouffville, ON
 CA L4A 2G8
 Contact: Shannon Abbott
 sabbott@gipi.com
 T: (905)750-5900
 F: