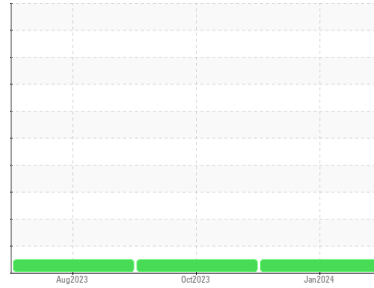


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
ST4704

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W40 (--- LTR)

DIAGNOSIS

Recommendation

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

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0078387	PC0080937	PC0077043
Sample Date	Client Info			20 Jan 2024	25 Oct 2023	04 Aug 2023
Machine Age	hrs	Client Info		5923	0	3580
Oil Age	hrs	Client Info		250	0	500
Oil Changed	Client Info			Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

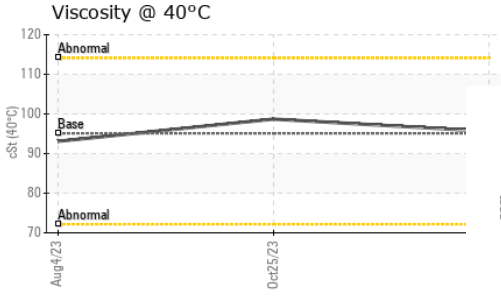
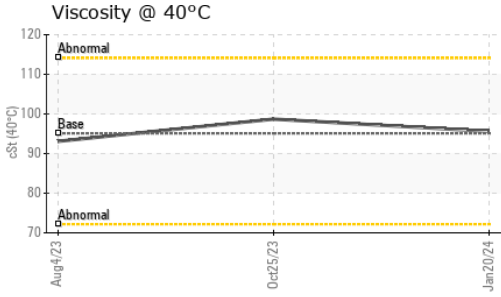
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	12	17	14
Chromium	ppm	ASTM D5185(m)	>20	3	6	5
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	3
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
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	45	32	29
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	65	57	60	58
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1160	1089	1099	1112
Calcium	ppm	ASTM D5185(m)	820	808	858	852
Phosphorus	ppm	ASTM D5185(m)	1160	993	970	1018
Zinc	ppm	ASTM D5185(m)	1260	1164	1201	1189
Sulfur	ppm	ASTM D5185(m)	3000	2810	2648	2676
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	6	10	11
Sodium	ppm	ASTM D5185(m)		4	5	5
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.7	12.7	11.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.6	22.9	22.4

OIL ANALYSIS REPORT

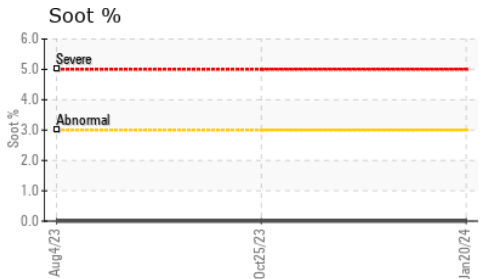
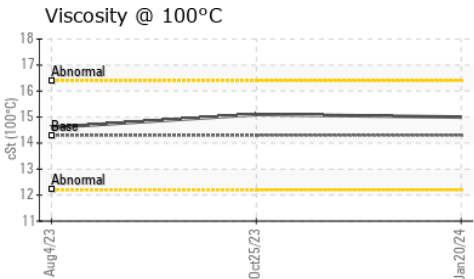
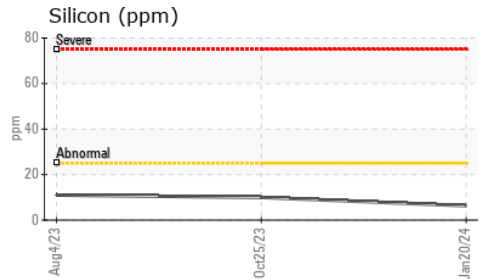
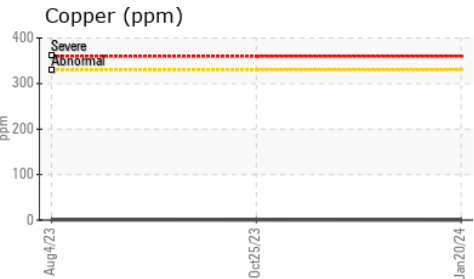
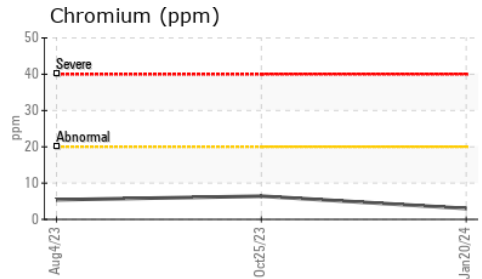
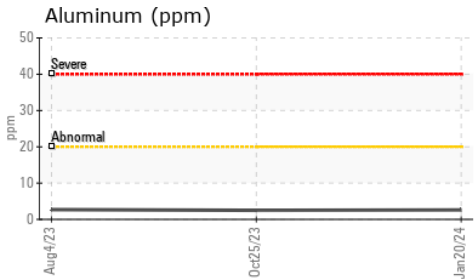
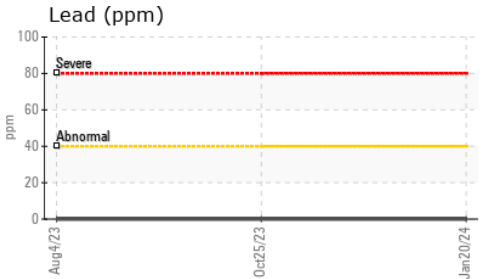
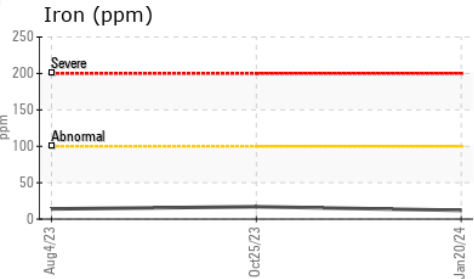


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	25.0	27.0	23.0

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	95.6	98.7	93.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	15.0	15.1	14.6
Viscosity Index (VI)	Scale	ASTM D2270*	169	164	160	163

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GPI) - 286 - Shoring & Foundations
Sample No. : PC0078387 **Received** : 01 Feb 2024
Lab Number : **02612725** **Diagnosed** : 01 Feb 2024
Unique Number : 5721820 **Diagnostician** : Bill Quesnel
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.

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