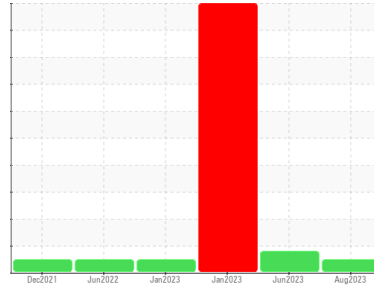


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
EX0097

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			PC0071552	PC0075311	PC0071600
Sample Date	Client Info			16 Aug 2023	07 Jun 2023	25 Jan 2023
Machine Age	hrs	Client Info		3059	0	2487
Oil Age	hrs	Client Info		0	0	1000
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	MARGINAL	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	▲ 4.9	1.2
Glycol	WC Method			NEG	NEG	▲ 0.02

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	4	6	● 3612
Chromium	ppm	ASTM D5185(m)	>20	0	0	▲ 36
Nickel	ppm	ASTM D5185(m)	>4	0	0	● 14
Titanium	ppm	ASTM D5185(m)		0	<1	▲ 31
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	1	▲ 462
Lead	ppm	ASTM D5185(m)	>40	0	0	1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	12
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	1
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	<1

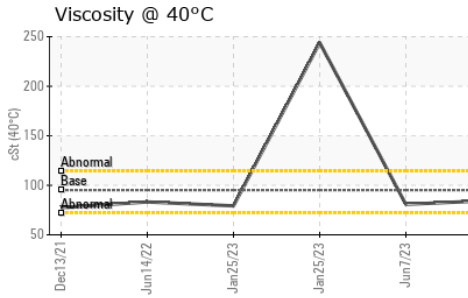
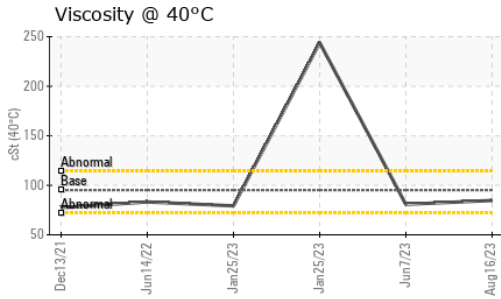
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	65	44	49	37
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	52	61	1
Manganese	ppm	ASTM D5185(m)	0	0	<1	▲ 34
Magnesium	ppm	ASTM D5185(m)	1160	1049	1048	▲ 171
Calcium	ppm	ASTM D5185(m)	820	785	781	▲ 1684
Phosphorus	ppm	ASTM D5185(m)	1160	1003	1007	416
Zinc	ppm	ASTM D5185(m)	1260	1120	1107	55
Sulfur	ppm	ASTM D5185(m)	3000	2665	2695	7718
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3	4	● 1825
Sodium	ppm	ASTM D5185(m)		4	4	▲ 106
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	▲ 166

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.9	9.0	5.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.9	20.2	20.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.7	18.7	19.7

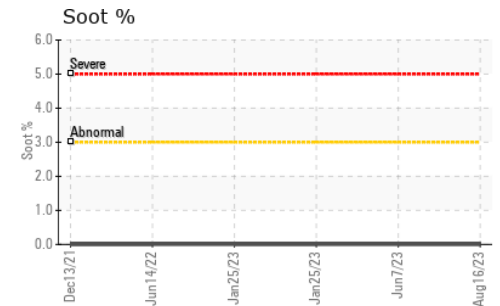
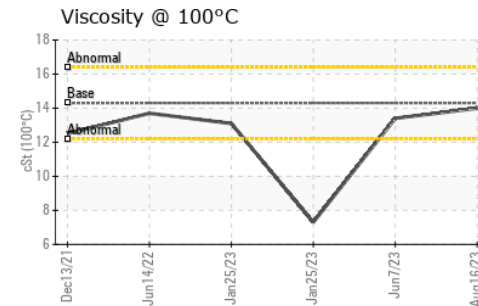
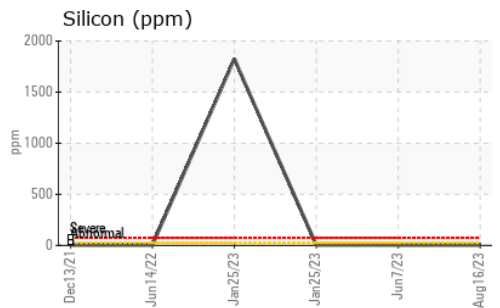
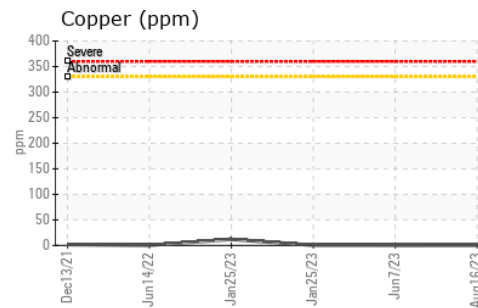
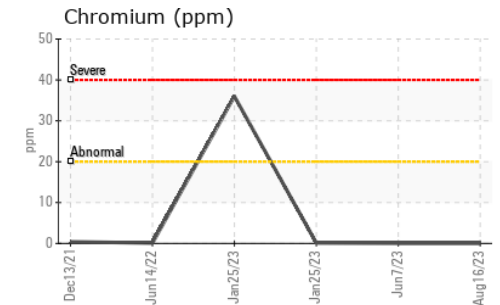
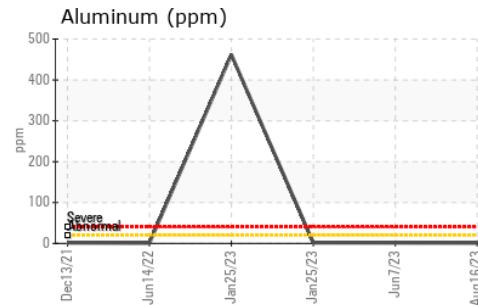
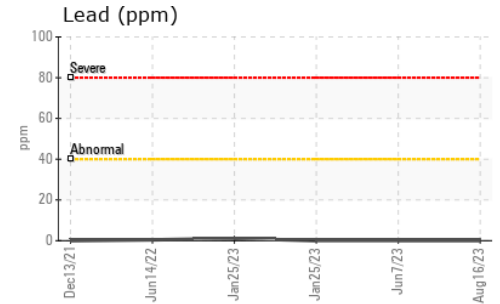
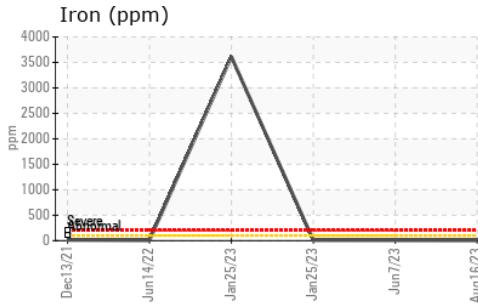
OIL ANALYSIS REPORT



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	84.7	80.8
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	14.0	13.4
Viscosity Index (VI)	Scale	ASTM D2270*	169	170	169

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
Sample No. : PC0071552 **Received** : 28 Aug 2023
Lab Number : 02578658 **Diagnosed** : 28 Aug 2023
Unique Number : 5631718 **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.

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