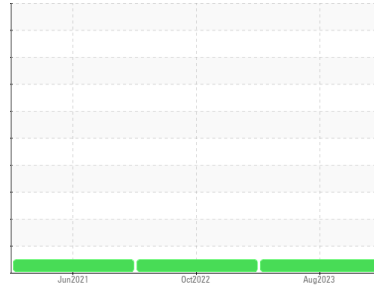


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
WL0228

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W40 (22 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			PC0078250	PC0056630	PC0047360
Sample Date	Client Info			05 Aug 2023	27 Oct 2022	03 Jun 2021
Machine Age	hrs	Client Info		3918	3380	1855
Oil Age	hrs	Client Info		500	0	0
Oil Changed	Client Info			Changed	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	32	47	12
Chromium	ppm	ASTM D5185(m)	>20	1	1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	4	2
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	13	12	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	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

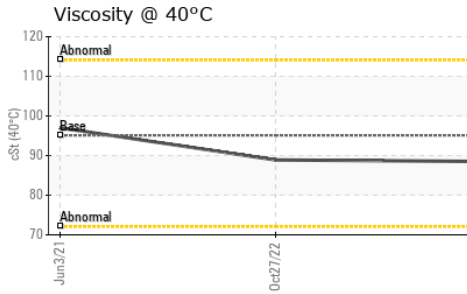
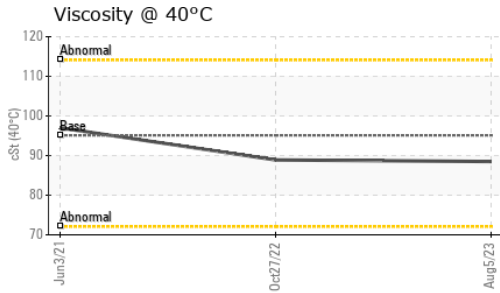
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	65	34	48	94
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	58	59	68
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	1124	1054	411
Calcium	ppm	ASTM D5185(m)	820	835	924	1794
Phosphorus	ppm	ASTM D5185(m)	1160	1065	1113	1023
Zinc	ppm	ASTM D5185(m)	1260	1212	1249	1247
Sulfur	ppm	ASTM D5185(m)	3000	2781	2883	2903
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

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

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.3	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.8	9.7	6.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.8	21.3	20.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.4	18.8	14.4

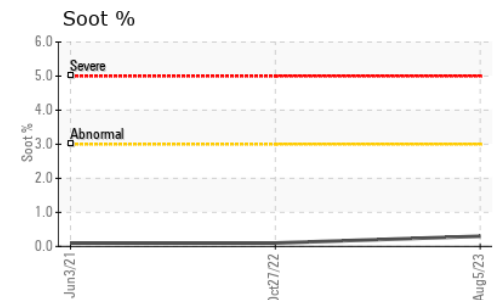
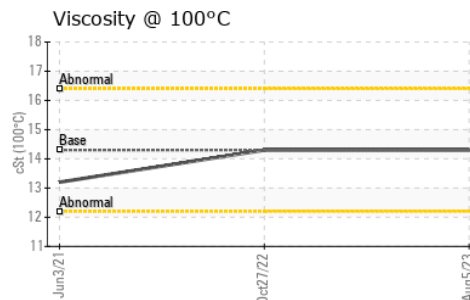
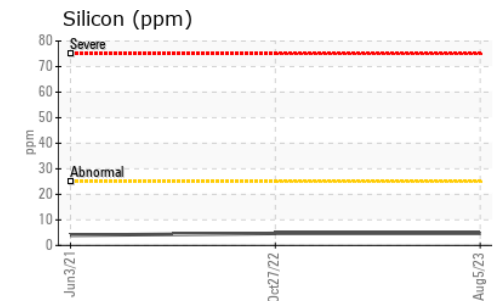
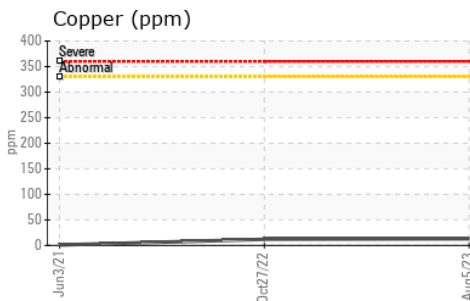
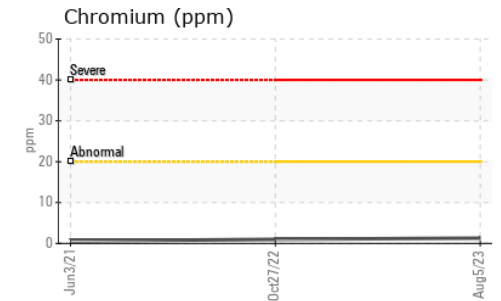
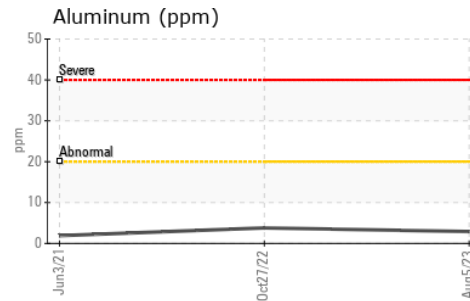
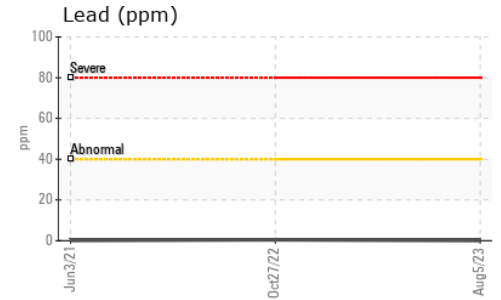
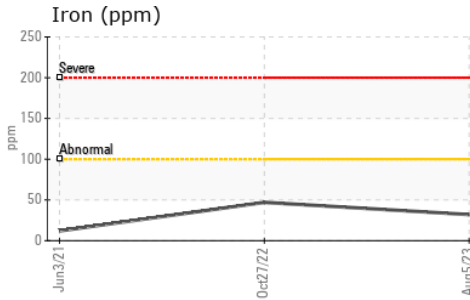
OIL ANALYSIS REPORT



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	88.5	88.9	97.0
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	14.3	14.3	13.2
Viscosity Index (VI)	Scale	ASTM D2270*	169	167	166	134

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GPI) - 286 - Shoring & Foundations
Sample No. : PC0078250 **Received** : 28 Aug 2023 151 Ram Forest Rd, Stouffville, ON CA L4A 2G8
Lab Number : **02578701** **Diagnosed** : 28 Aug 2023 Contact: Shannon Abbott sabbott@gipi.com
Unique Number : 5631761 **Diagnostician** : Wes Davis T: (905)750-5900
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.