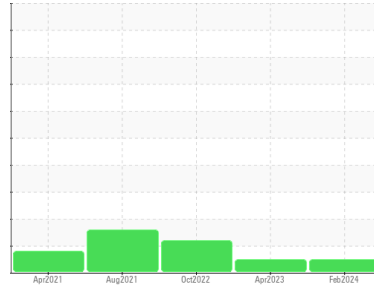


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
EX0098

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W40 (5 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			PC0082224	PC0048348	PC0066253
Sample Date	Client Info			27 Feb 2024	18 Apr 2023	17 Oct 2022
Machine Age	hrs	Client Info		2440	2200	0
Oil Age	hrs	Client Info		0	500	0
Oil Changed	Client Info			Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	▲ 4.2
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

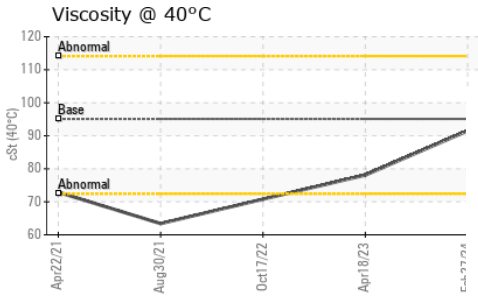
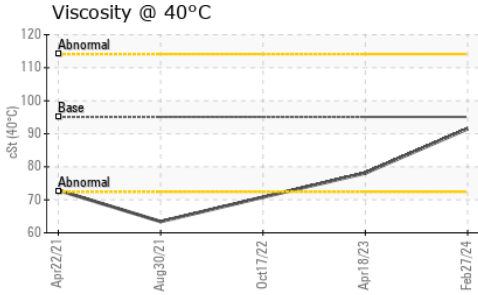
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	13	21	50
Chromium	ppm	ASTM D5185(m)	>20	2	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	3	4
Lead	ppm	ASTM D5185(m)	>40	<1	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	4	13
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	<1
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	42	36	30
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	53	59	52
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	1045	1072	978
Calcium	ppm	ASTM D5185(m)	820	787	810	771
Phosphorus	ppm	ASTM D5185(m)	1160	950	1006	912
Zinc	ppm	ASTM D5185(m)	1260	1129	1111	1054
Sulfur	ppm	ASTM D5185(m)	3000	2745	2642	2464
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	7	4	5
Sodium	ppm	ASTM D5185(m)		4	6	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0.2	0.7
Nitration	Abs/cm	ASTM D7624*	>20	11.1	10.6	11.9
Sulfation	Abs.1mm	ASTM D7415*	>30	21.3	21.1	23.3

OIL ANALYSIS REPORT

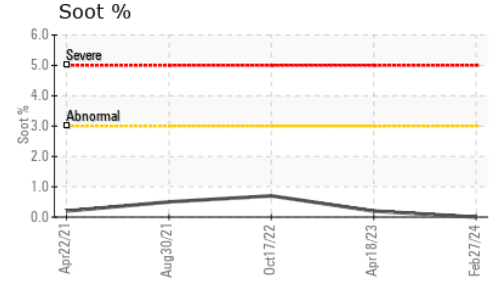
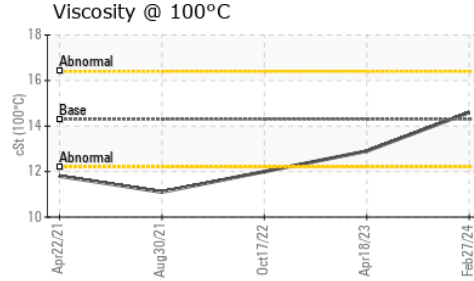
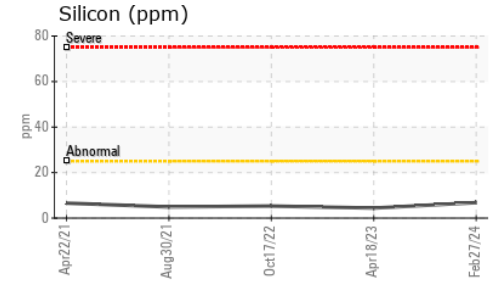
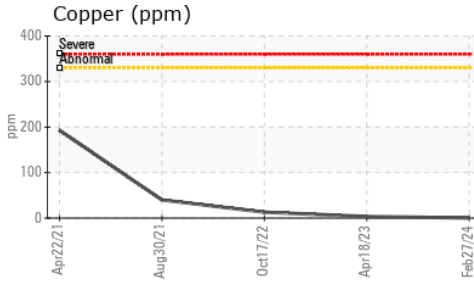
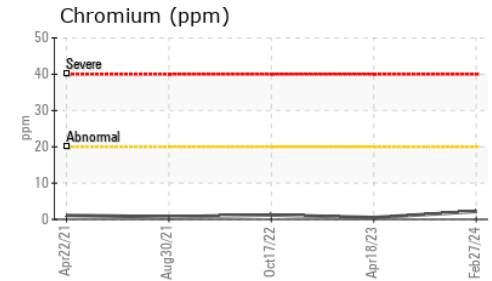
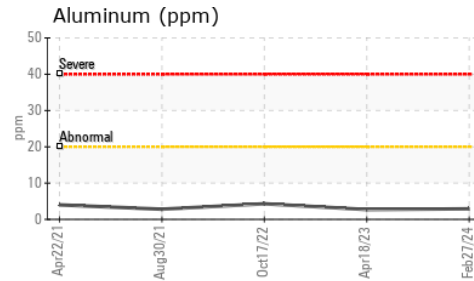
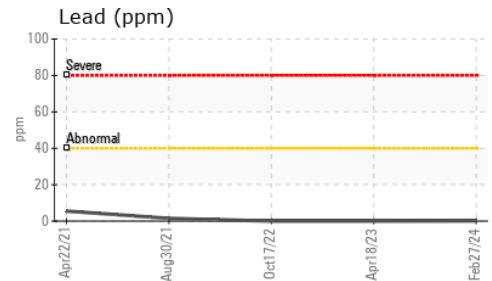
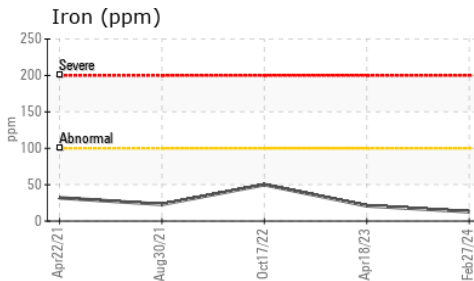


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	23.6	20.6	22.1

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	91.5	78.1	▲ 70.8
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	14.6	12.9	12.0
Viscosity Index (VI)	Scale	ASTM D2270*	169	166	166	166

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082224
Lab Number : 02619155
Unique Number : 5736265
Test Package : MOB 1 (Additional Tests: KV40, VI)

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
 151 Ram Forest Rd,
 Stouffville, ON
 CA L4A 2G8
 Contact: Shannon Abbott
 sabbott@gipi.com
 T: (905)750-5900
 F:

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.