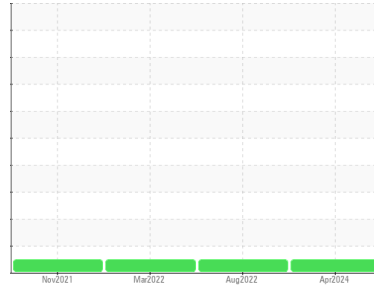


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

FL0136

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			PC0088295	PC0065372	PC0060471
Sample Date	Client Info			29 Apr 2024	12 Aug 2022	17 Mar 2022
Machine Age	hrs	Client Info		2173	630	122
Oil Age	hrs	Client Info		0	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
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

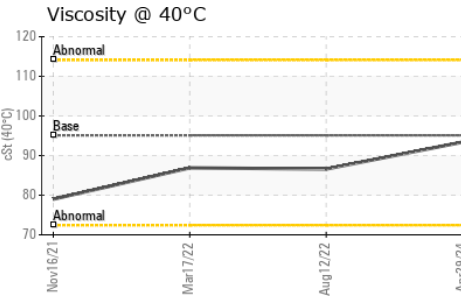
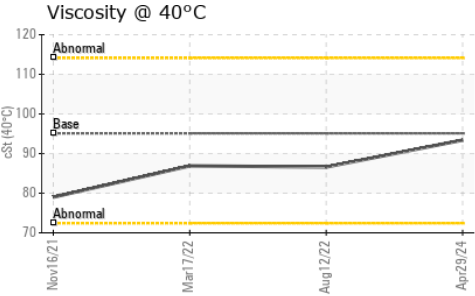
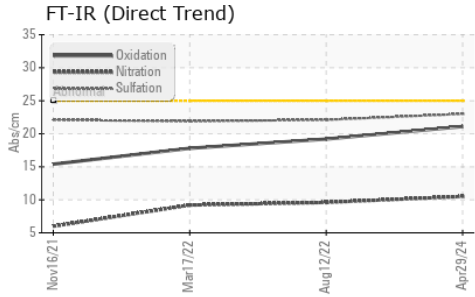
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	39	27	38
Chromium	ppm	ASTM D5185(m)	>20	1	2	4
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	6
Lead	ppm	ASTM D5185(m)	>40	4	1	1
Copper	ppm	ASTM D5185(m)	>330	201	34	21
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	32	37	79
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	60	56	64
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	1115	1077	1029
Calcium	ppm	ASTM D5185(m)	820	867	884	902
Phosphorus	ppm	ASTM D5185(m)	1160	923	994	1000
Zinc	ppm	ASTM D5185(m)	1260	1202	1178	1163
Sulfur	ppm	ASTM D5185(m)	3000	2414	2708	2597
Lithium	ppm	ASTM D5185(m)		<1	<1	0

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5	6	18
Sodium	ppm	ASTM D5185(m)		5	6	9
Potassium	ppm	ASTM D5185(m)	>20	<1	0	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.9	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	10.5	9.6	9.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.0	22.1	21.9

OIL ANALYSIS REPORT

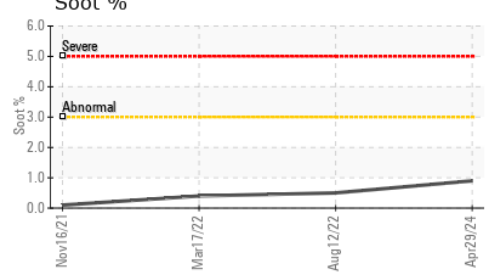
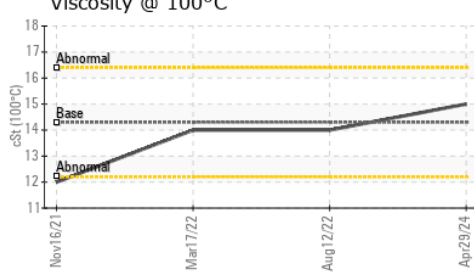
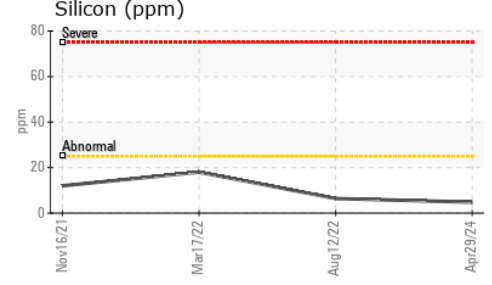
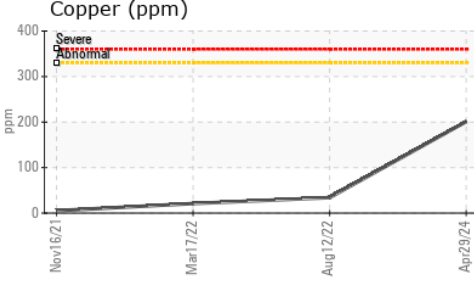
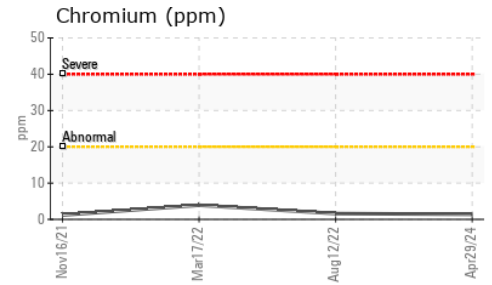
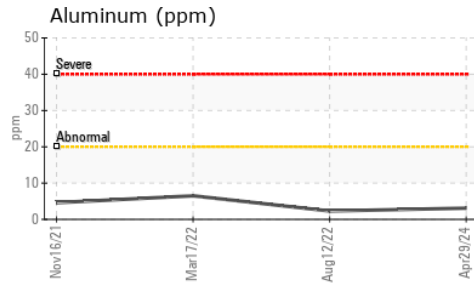
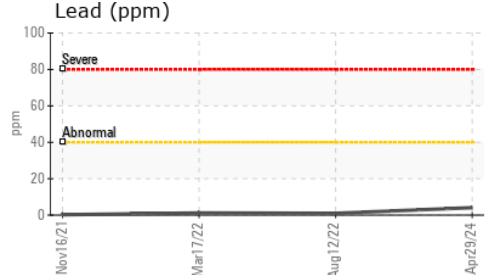
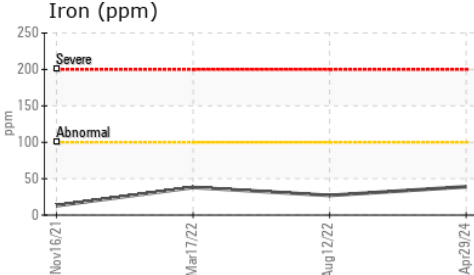


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	21.1	19.2	17.8

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	93.4	86.6	86.9
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	15.0	14.0	14.0
Viscosity Index (VI)	Scale	ASTM D2270*	169	168	166	166

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0088295
Lab Number : 02634523
Unique Number : 5775676
Test Package : MOB 1 (Additional Tests: KV40, VI)

Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Wes Davis

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.