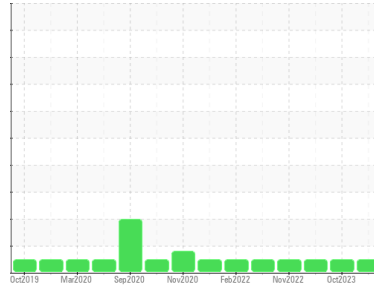


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
CR227

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W40 (28 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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			PC0078309	PC	PC0048351
Sample Date	Client Info			23 Feb 2024	25 Oct 2023	12 Apr 2023
Machine Age	hrs	Client Info		22567	0	21390
Oil Age	hrs	Client Info		0	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

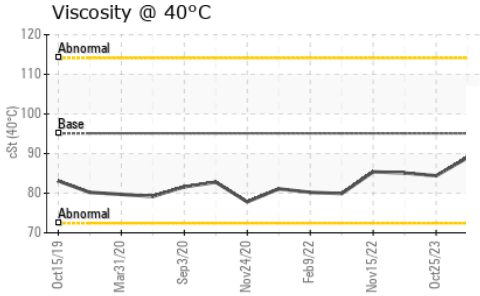
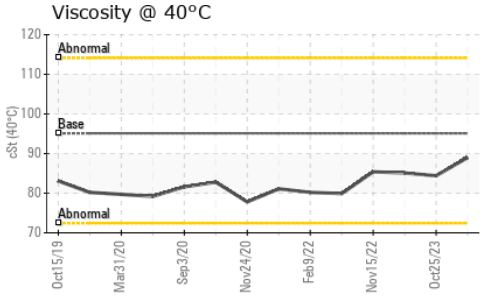
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	26	20	5
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	3	<1
Lead	ppm	ASTM D5185(m)	>40	6	<1	1
Copper	ppm	ASTM D5185(m)	>330	4	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<1	0	<1
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	32	32	40
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	65	55	61	57
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1160	1059	1066	1093
Calcium	ppm	ASTM D5185(m)	820	819	838	856
Phosphorus	ppm	ASTM D5185(m)	1160	975	972	1087
Zinc	ppm	ASTM D5185(m)	1260	1137	1164	1206
Sulfur	ppm	ASTM D5185(m)	3000	2698	2727	2868
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4	4	3
Sodium	ppm	ASTM D5185(m)		5	5	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.2	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.5	9.0	10.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.2	20.3	20.4

OIL ANALYSIS REPORT

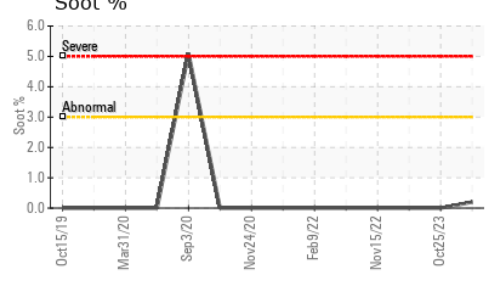
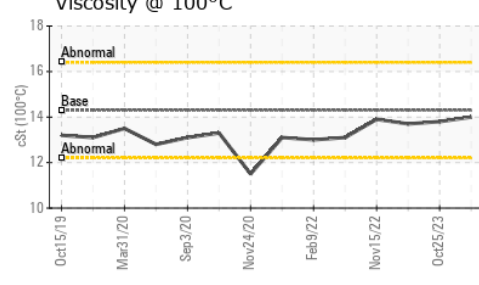
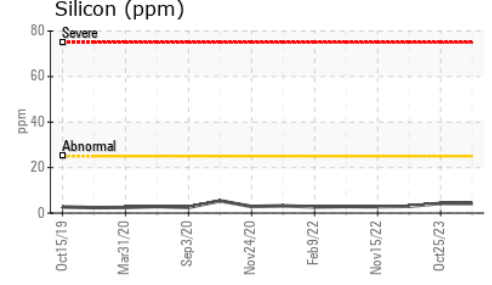
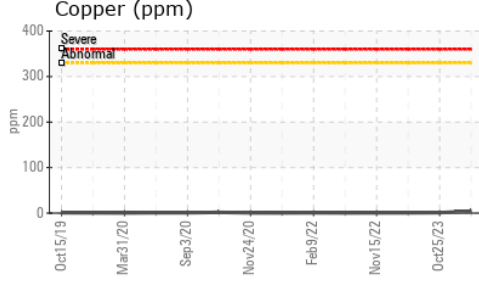
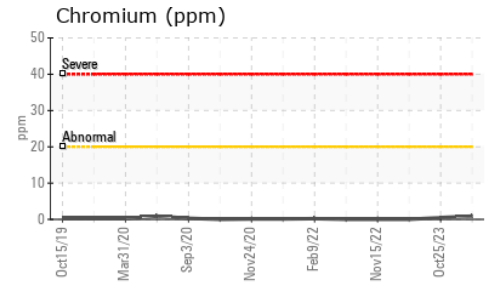
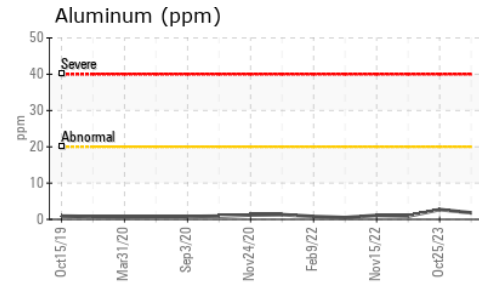
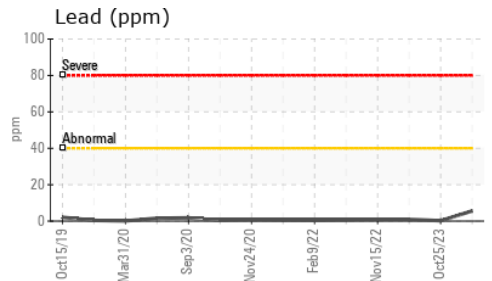
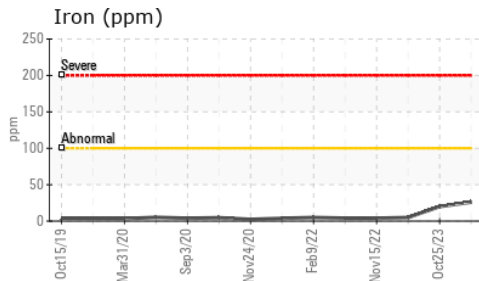


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/1mm	ASTM D7414*	>25	25.6	18.7	20.0

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	89.0	84.4	85.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	14.0	13.8	13.7
Viscosity Index (VI)	Scale	ASTM D2270*	169	161	167	164

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078309
Lab Number : **02619152**
Unique Number : 5736262
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.*