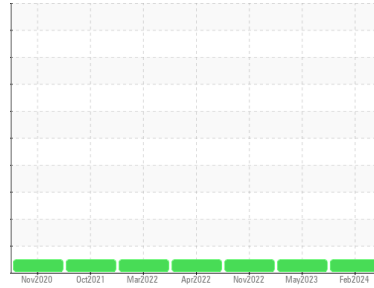


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
CR254

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W40 (18 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			PC0078305	PC0056410	PC0056658
Sample Date	Client Info			11 Feb 2024	25 May 2023	09 Nov 2022
Machine Age	hrs	Client Info		6500	5840	0
Oil Age	hrs	Client Info		0	500	6891
Oil Changed	Client Info			Changed	Changed	N/A
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

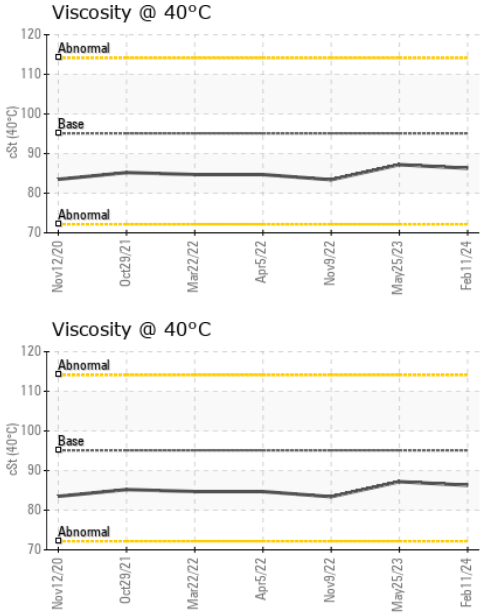
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	9	8	10
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
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	38	42	32
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	55	57	53
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	1057	1079	1011
Calcium	ppm	ASTM D5185(m)	820	794	861	858
Phosphorus	ppm	ASTM D5185(m)	1160	986	1051	1021
Zinc	ppm	ASTM D5185(m)	1260	1149	1178	1139
Sulfur	ppm	ASTM D5185(m)	3000	2847	2776	2705
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

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

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.4	9.5	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	20.3	21.8

OIL ANALYSIS REPORT

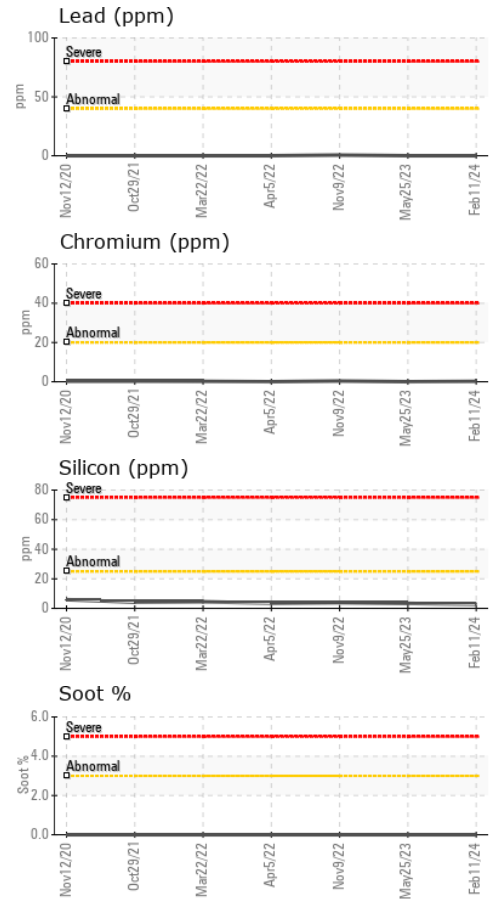
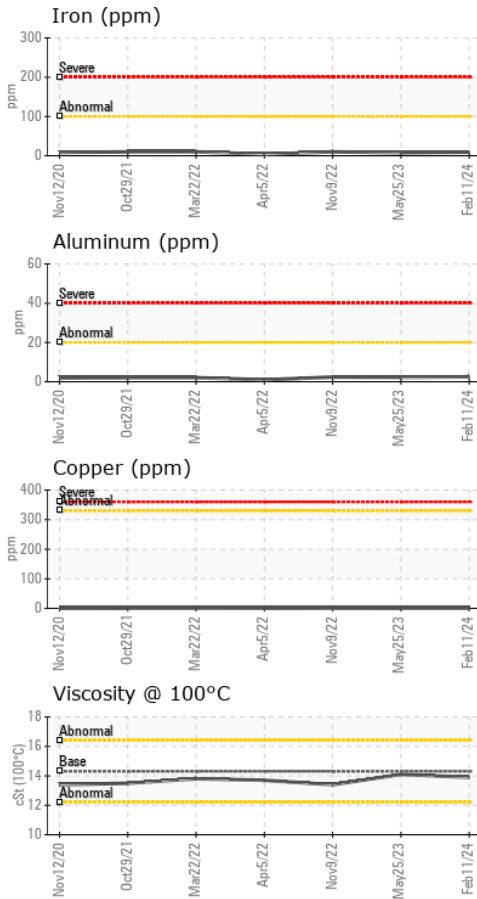


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	21.8	20.0	20.8

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	VLITE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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	86.3	87.2	83.4
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	13.9	14.1	13.4
Viscosity Index (VI)	Scale	ASTM D2270*	169	165	167	163

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078305
Lab Number : 02615558
Unique Number : 5724653
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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.