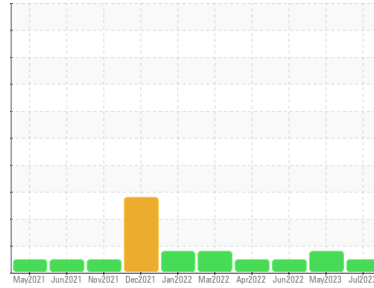


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
OE1247

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W40 (7 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0077042	PC0056408	PC0064579
Sample Date	Client Info		28 Jul 2023	31 May 2023	02 Jun 2022
Machine Age	hrs	Client Info	4016	3377	12600
Oil Age	hrs	Client Info	500	500	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	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	8	13	3
Chromium	ppm	ASTM D5185(m)	>20	<1	1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	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	2	3	1
Lead	ppm	ASTM D5185(m)	>40	0	<1	0
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<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	35	45	45
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	57	65	53
Manganese	ppm	ASTM D5185(m)	0	<1	<1	0
Magnesium	ppm	ASTM D5185(m)	1160	1140	1189	1067
Calcium	ppm	ASTM D5185(m)	820	828	953	819
Phosphorus	ppm	ASTM D5185(m)	1160	1023	1084	996
Zinc	ppm	ASTM D5185(m)	1260	1212	1282	1141
Sulfur	ppm	ASTM D5185(m)	3000	2647	2790	2630
Lithium	ppm	ASTM D5185(m)		<1	<1	0

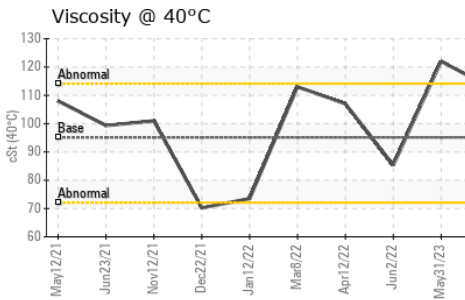
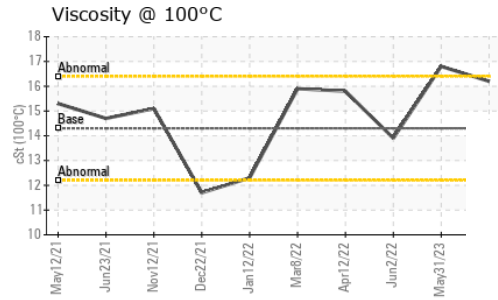
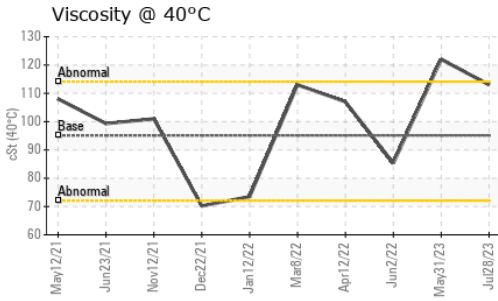
CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	5	8	4
Sodium	ppm	ASTM D5185(m)		4	5	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	14.1	15.1	9.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.7	27.5	22.7

OIL ANALYSIS REPORT

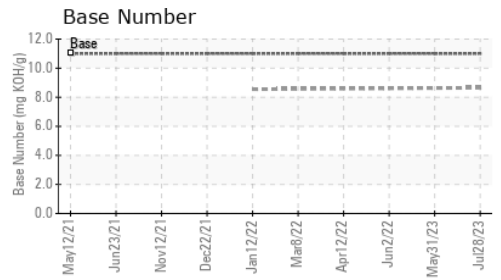
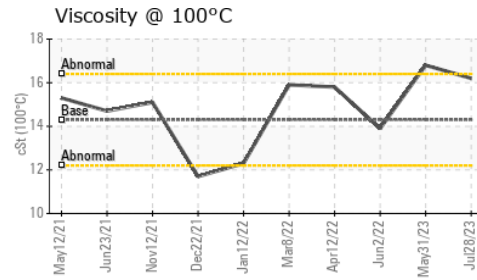
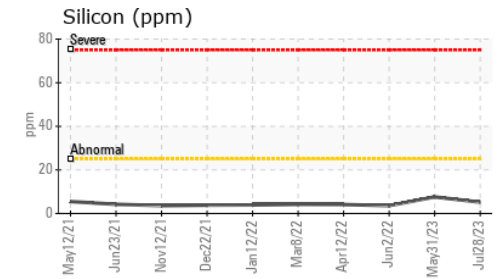
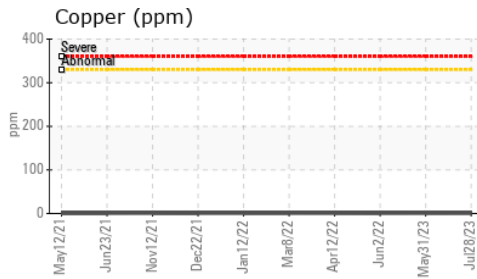
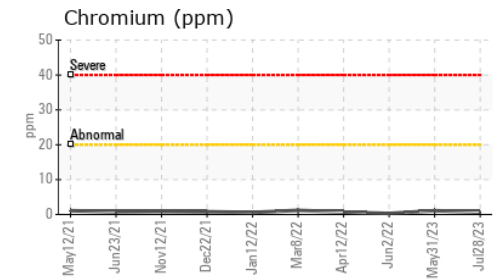
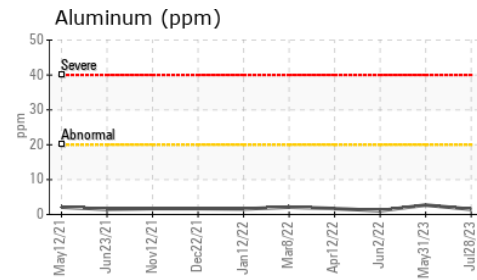
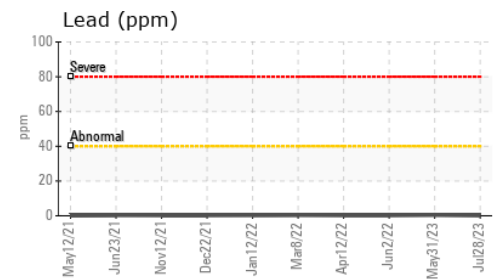
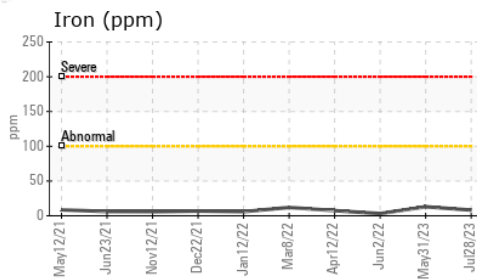


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	31.0	38.7	20.5
Base Number (BN)	mg KOH/g	ASTM D2896*	11.0	8.65	---	---

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	113	▲ 122	85.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	16.2	▲ 16.8	13.9
Viscosity Index (VI)	Scale	ASTM D2270*	169	153	149	167

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
Sample No. : PC0077042 **Received** : 28 Aug 2023
Lab Number : 02578726 **Diagnosed** : 29 Aug 2023
Unique Number : 5631786 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (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.

151 Ram Forest Rd,
 Stouffville, ON
 CA L4A 2G8
 Contact: Shannon Abbott
 sabbott@gipi.com
 T: (905)750-5900
 F: