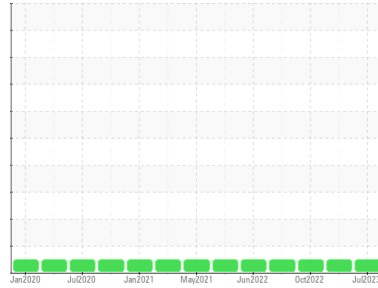


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
DR139

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W40 (38 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			PC0078552	PC0061996	PC0065655
Sample Date	Client Info			24 Jul 2023	06 Mar 2023	19 Oct 2022
Machine Age	hrs	Client Info		2583	2424	2134
Oil Age	hrs	Client Info		250	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
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	6	13	11
Chromium	ppm	ASTM D5185(m)	>20	<1	0	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		<1	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	2
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	4	2	2
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
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

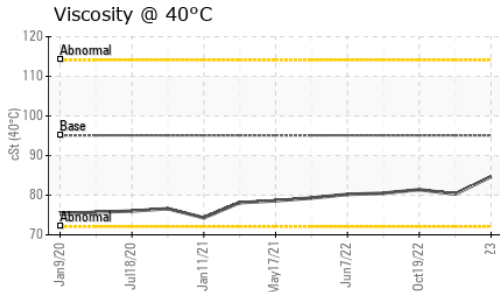
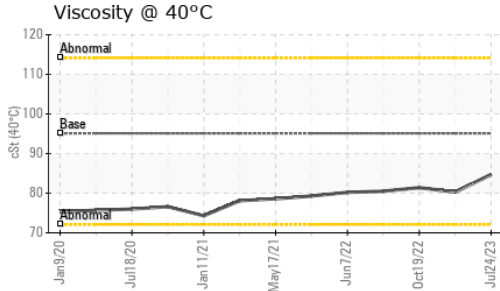
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	65	65	46	40
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	49	57	55
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	945	1094	1052
Calcium	ppm	ASTM D5185(m)	820	903	850	813
Phosphorus	ppm	ASTM D5185(m)	1160	998	1063	1036
Zinc	ppm	ASTM D5185(m)	1260	1090	1182	1140
Sulfur	ppm	ASTM D5185(m)	3000	2678	2823	2755
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

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

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.4	9.2	8.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	22.5	21.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	18.0	18.1

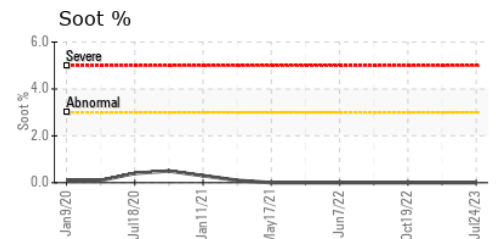
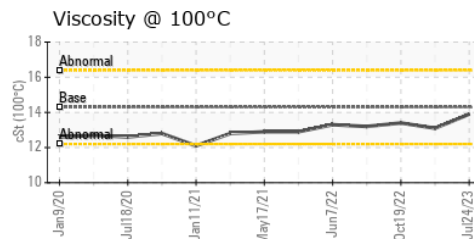
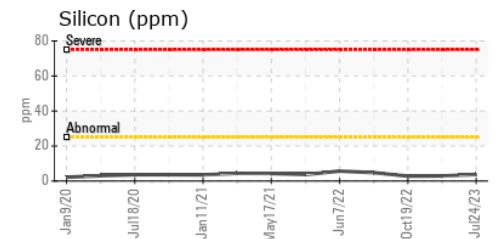
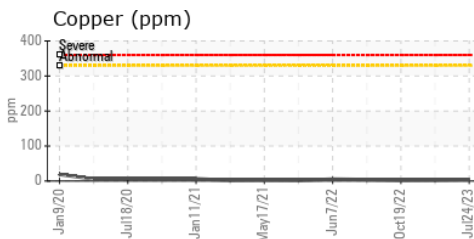
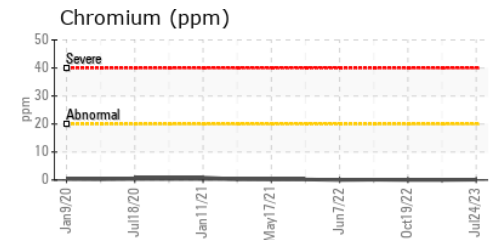
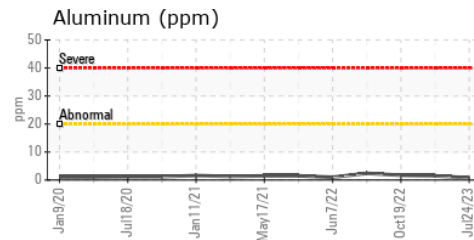
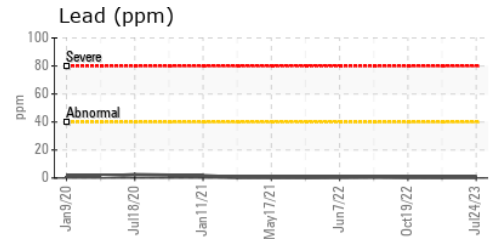
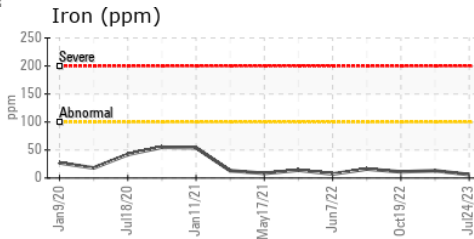
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	VLITE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	84.7	80.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	13.9	13.1
Viscosity Index (VI)	Scale	ASTM D2270*	169	169	164

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 266 - Shoring & Foundations
Sample No. : PC0078552 **Received** : 28 Aug 2023
Lab Number : 02578704 **Diagnosed** : 28 Aug 2023
Unique Number : 5631764 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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.

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