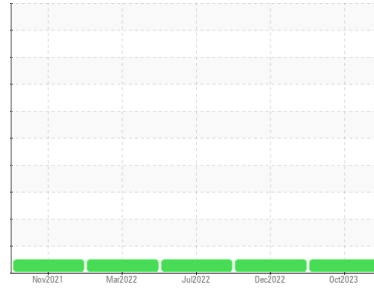




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

2591

Component

Diesel Engine

Fluid

PETRO CANADA DURON HP 15W40 (--- QTS)

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 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		RW0004883	RW0004266	RW0002824
Sample Date	Client Info		12 Oct 2023	08 Dec 2022	25 Jul 2022
Machine Age	hrs	Client Info	5495	4640	3965
Oil Age	hrs	Client Info	150	675	500
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 D5185m >100	8	26	20
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	<1	0	0
Titanium	ppm	ASTM D5185m	<1	<1	2
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	2	3	3
Lead	ppm	ASTM D5185m >40	<1	0	<1
Copper	ppm	ASTM D5185m >330	<1	1	1
Tin	ppm	ASTM D5185m >15	0	0	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	7	<1	199
Barium	ppm	ASTM D5185m	2	1	0
Molybdenum	ppm	ASTM D5185m	55	64	74
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	808	808	439
Calcium	ppm	ASTM D5185m	971	1169	1350
Phosphorus	ppm	ASTM D5185m	906	952	992
Zinc	ppm	ASTM D5185m	1102	1204	1237
Sulfur	ppm	ASTM D5185m	3031	3289	3209

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	3	4	6
Sodium	ppm	ASTM D5185m	2	<1	2
Potassium	ppm	ASTM D5185m >20	4	2	2

INFRA-RED

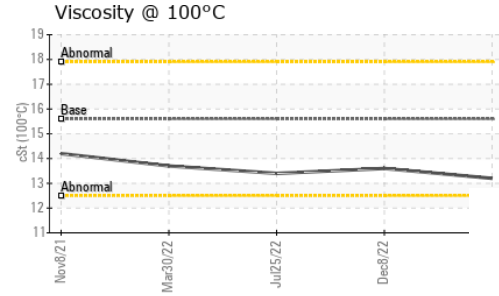
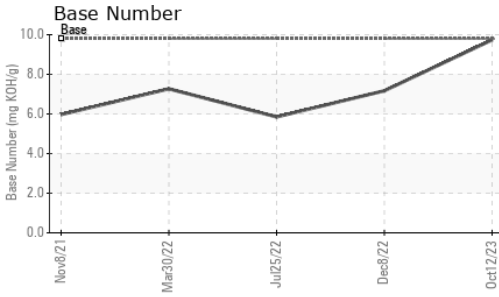
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	1.3	1.1
Nitration	Abs/cm	*ASTM D7624 >20	7.4	12.6	10.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.7	25.6	25.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.2	20.5	19.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	9.74	7.17	5.85



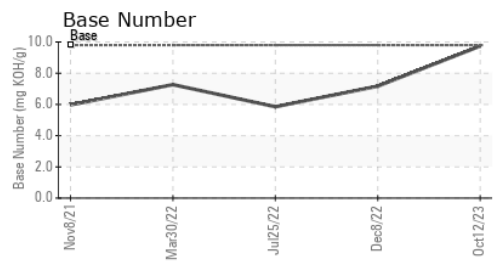
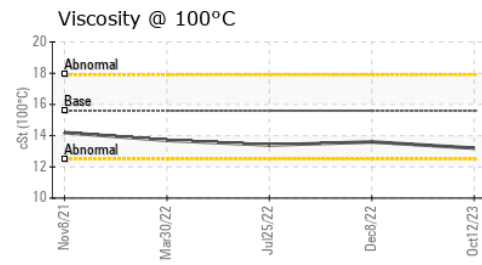
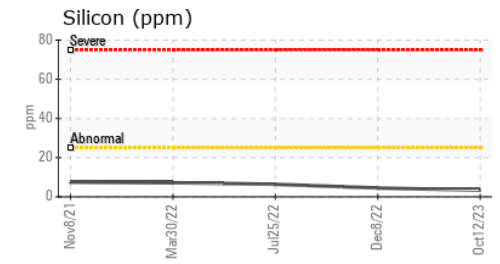
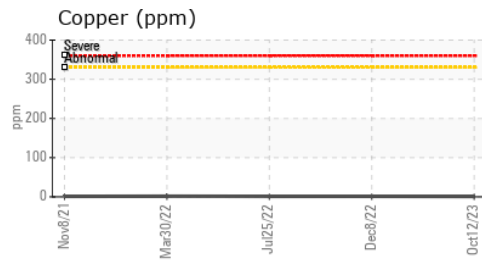
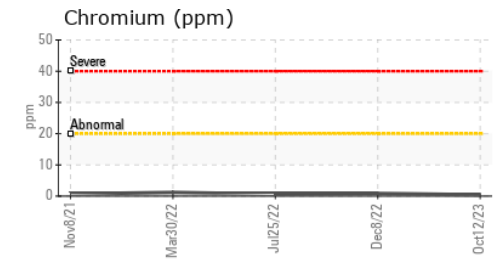
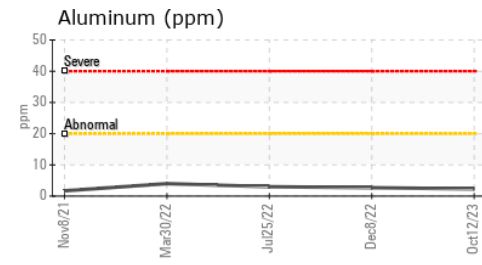
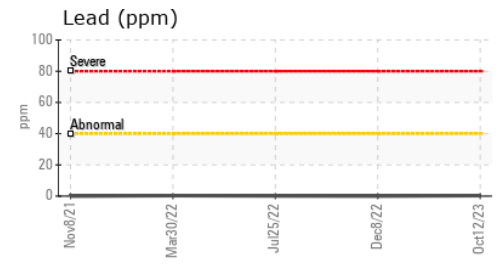
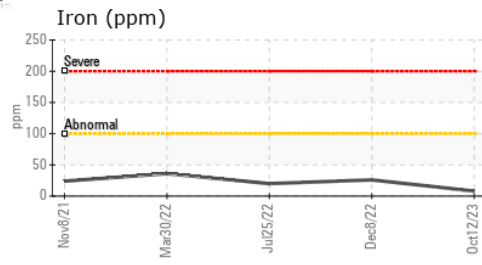
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	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 @ 100°C	cSt	ASTM D445	15.6	13.2	13.6	13.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0004883 **Received** : 06 Nov 2023
Lab Number : 05999205 **Diagnosed** : 07 Nov 2023
Unique Number : 10727565 **Diagnostician** : Wes Davis
Test Package : MOB 2

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Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)