

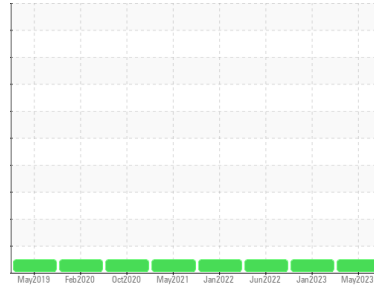
# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



Machine Id  
**335U**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**



## 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	history 1	history 2
Sample Number	Client Info		<b>PCA0095371</b>	PCA0082317	PCA0076588
Sample Date	Client Info		<b>12 May 2023</b>	30 Jan 2023	16 Jun 2022
Machine Age	mls	Client Info	<b>152201</b>	139859	118699
Oil Age	mls	Client Info	<b>12347</b>	15168	17006
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >100	<b>15</b>	23	28
Chromium	ppm	ASTM D5185m >20	<b>1</b>	2	2
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	7	5
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	3	3
Copper	ppm	ASTM D5185m >330	<b>2</b>	4	5
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	2	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>63</b>	64	64
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185m 1010	<b>974</b>	1043	1019
Calcium	ppm	ASTM D5185m 1070	<b>1064</b>	1188	1164
Phosphorus	ppm	ASTM D5185m 1150	<b>996</b>	1069	1034
Zinc	ppm	ASTM D5185m 1270	<b>1268</b>	1337	1352
Sulfur	ppm	ASTM D5185m 2060	<b>3229</b>	3379	3291

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	7	6
Sodium	ppm	ASTM D5185m	<b>2</b>	3	8
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0

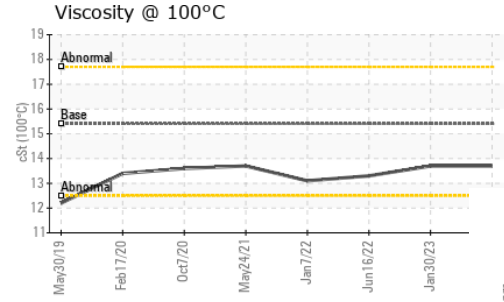
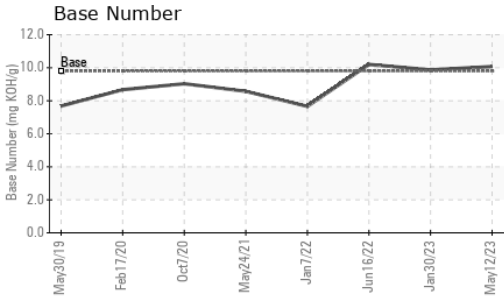
## INFRA-RED

	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.0</b>	9.1	12.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.9</b>	20.4	23.5

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.2</b>	17.2	20.1
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>10.07</b>	9.87	10.2

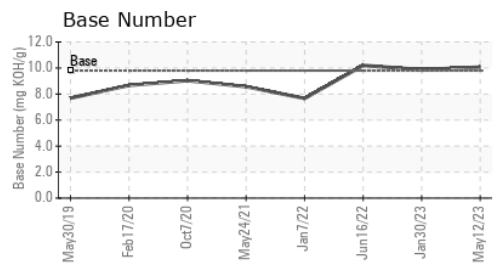
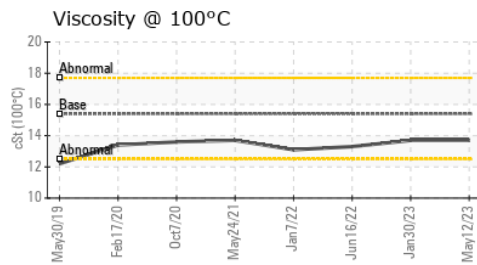
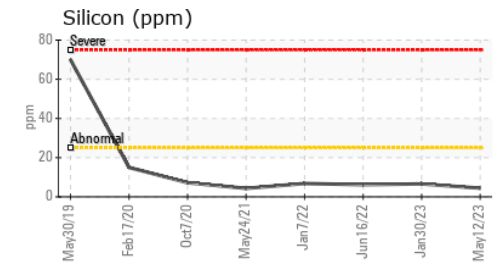
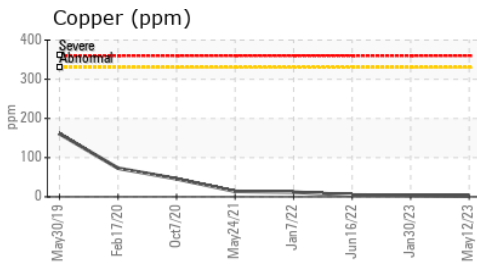
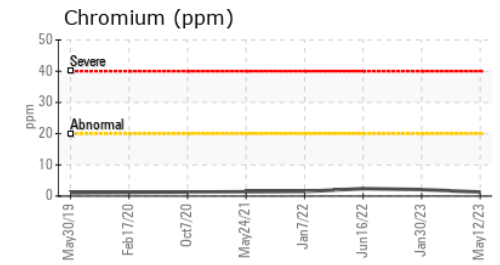
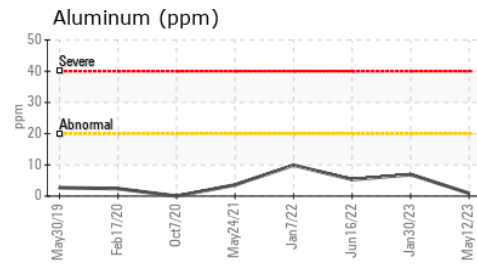
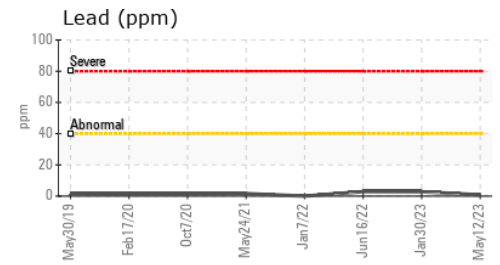
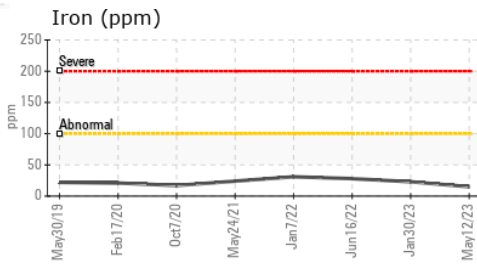
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	13.7	13.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0095371  
**Lab Number** : 05895213  
**Unique Number** : 10551023  
**Test Package** : MOB 2

**BROWN BUS COMPANY - UPSTATE TRANSIT**  
 50 VENNERS ROAD  
 AMSTERDAM, NY  
 US 12010  
 Contact: CONNIE WILBUR  
 cwilbur@browncoach.com  
 T: (518)843-4700  
 F: (518)843-3600

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)