

Machine Id  
**TEMSA MOTOR COACH 164**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (3 GAL)**

**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			<b>PCA0111549</b>	PCA0101056	---
Sample Date	Client Info			<b>26 Dec 2023</b>	21 Aug 2023	---
Machine Age	mls Client Info			<b>24063</b>	11977	---
Oil Age	mls Client Info			<b>11477</b>	11977	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2		<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	<b>38</b>	86	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	3	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	▲ 10	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>3</b>	19	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

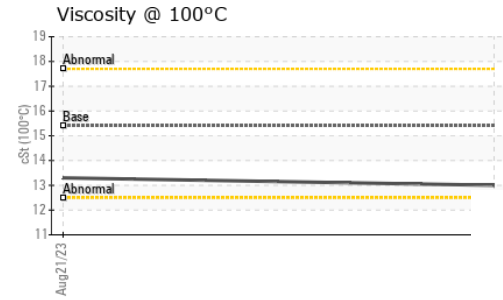
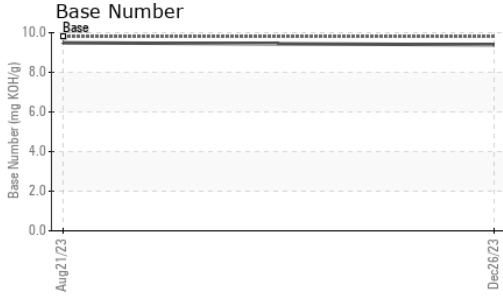
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>7</b>	62	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	8	---
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	64	---
Manganese	ppm	ASTM D5185m	0	<b>2</b>	8	---
Magnesium	ppm	ASTM D5185m	1010	<b>892</b>	490	---
Calcium	ppm	ASTM D5185m	1070	<b>1062</b>	1649	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1017</b>	984	---
Zinc	ppm	ASTM D5185m	1270	<b>1279</b>	1200	---
Sulfur	ppm	ASTM D5185m	2060	<b>2990</b>	3128	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>11</b>	▲ 39	---
Sodium	ppm	ASTM D5185m		<b>3</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	<b>0.3</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	8.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.1</b>	19.8	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	16.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.39</b>	9.49	---

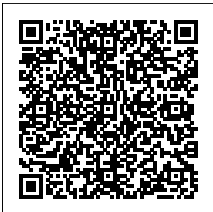
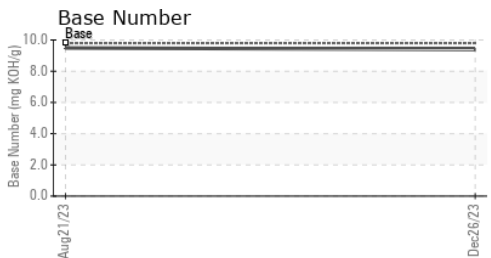
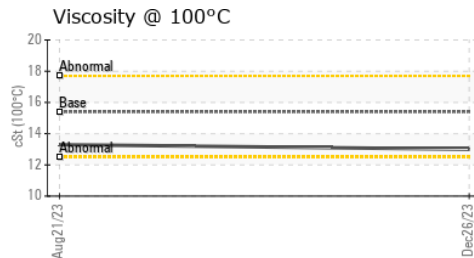
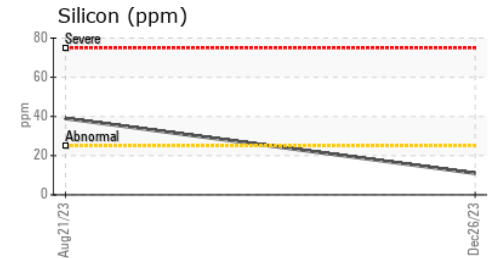
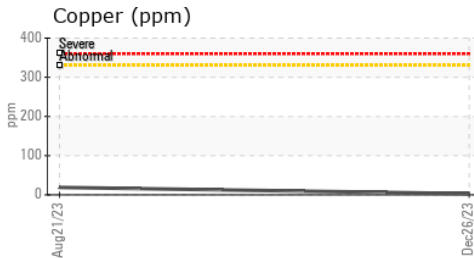
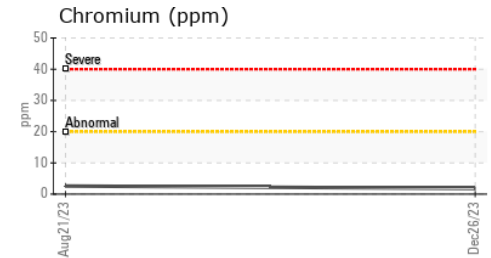
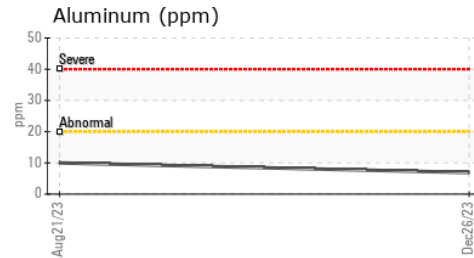
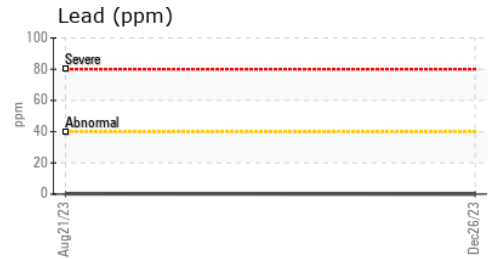
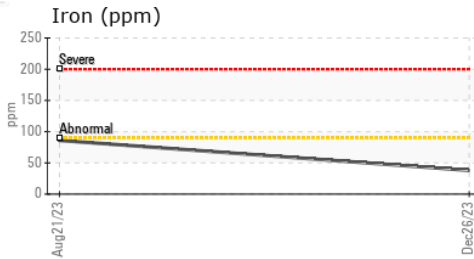
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
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	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.0</b>	13.3	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0111549 **Recieved** : 03 Jan 2024  
**Lab Number** : **06050162** **Diagnosed** : 04 Jan 2024  
**Unique Number** : 10816111 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 2

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