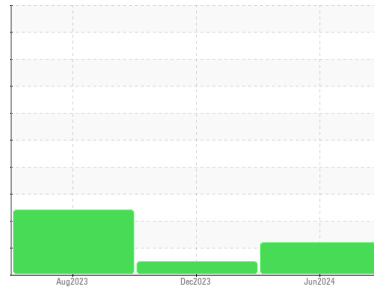


OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



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

DIAGNOSIS

● Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

● Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0125064	PCA0111549	PCA0101056
Sample Date	Client Info			24 Jun 2024	26 Dec 2023	21 Aug 2023
Machine Age	mls	Client Info		36434	24063	11977
Oil Age	mls	Client Info		12371	11477	11977
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	36	38	86
Chromium	ppm	ASTM D5185m	>20	1	2	3
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	7	7	10
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	1	3	19
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

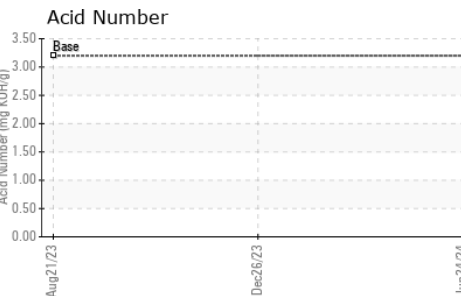
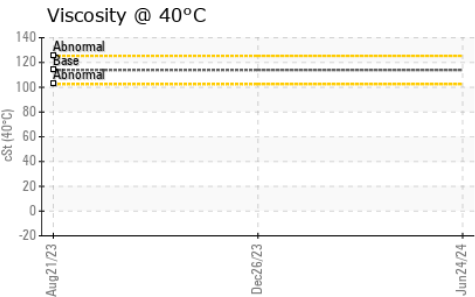
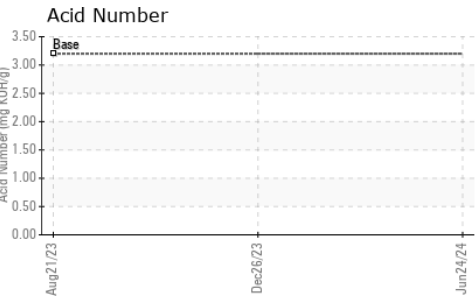
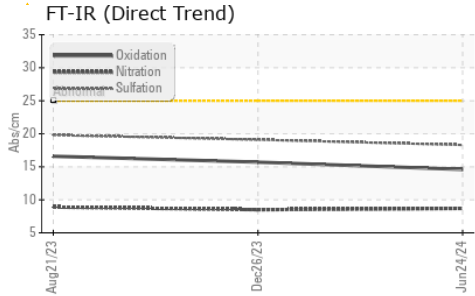
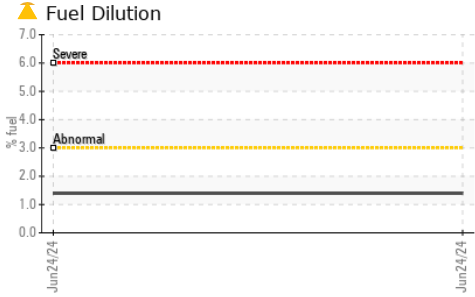
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	18	7	62
Barium	ppm	ASTM D5185m	0	0	0	8
Molybdenum	ppm	ASTM D5185m	60	71	58	64
Manganese	ppm	ASTM D5185m	0	1	2	8
Magnesium	ppm	ASTM D5185m	1010	914	892	490
Calcium	ppm	ASTM D5185m	1070	1129	1062	1649
Phosphorus	ppm	ASTM D5185m	1150	998	1017	984
Zinc	ppm	ASTM D5185m	1270	1214	1279	1200
Sulfur	ppm	ASTM D5185m	2060	3467	2990	3128

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	11	▲ 39
Sodium	ppm	ASTM D5185m		2	3	2
Potassium	ppm	ASTM D5185m	>20	2	4	3
Fuel	%	ASTM D3524	>3.0	▲ 1.4	<1.0	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.7	8.5	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	19.1	19.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	15.7	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.56	9.39	9.49

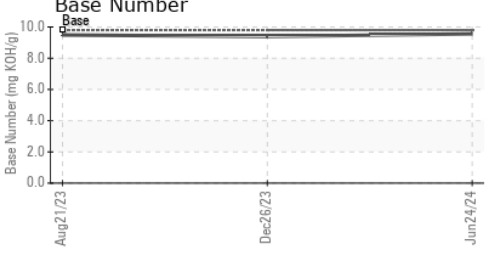
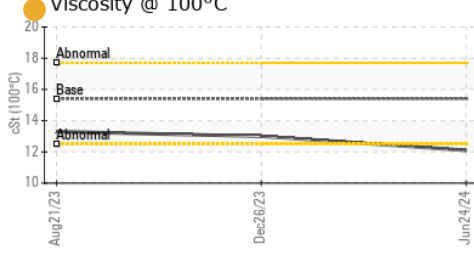
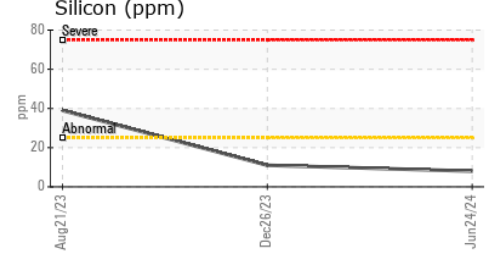
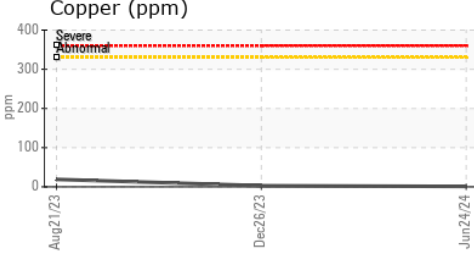
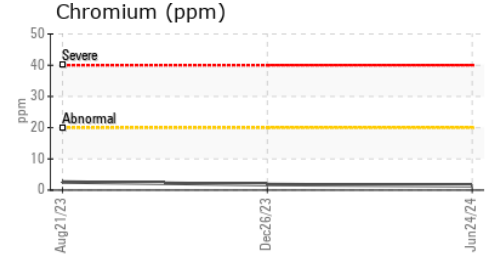
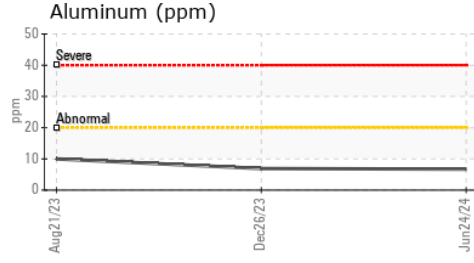
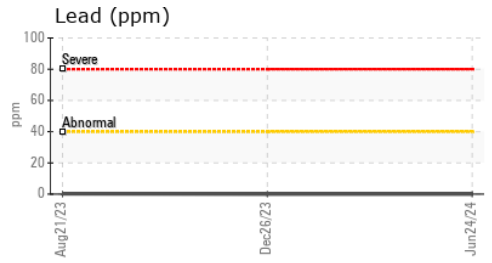
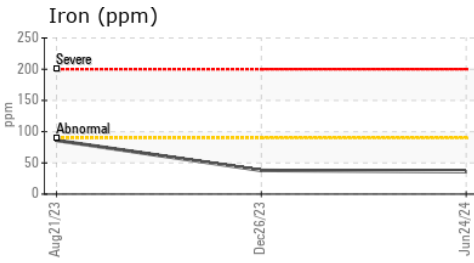
OIL ANALYSIS REPORT



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	15.4	● 12.1	13.0	13.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0125064 **Received** : 02 Jul 2024
Lab Number : 06226452 **Tested** : 05 Jul 2024
Unique Number : 11109945 **Diagnosed** : 05 Jul 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: FuelDilution, KV40, PercentFuel, TAN Man)

BROWN BUS COMPANY - UPSTATE TRANSIT
 50 VENNER ROAD
 AMSTERDAM, NY
 US 12010

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: CONNIE WILBUR
cwilbur@browncoach.com

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

T: (518)843-4700

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (518)843-3600