WEAR CONTAMINATION FLUID CONDITION

NORMAL

MARGINAL

NORMAL

Machine Id **1522**

Component Diesel Engine

RECOMMENDATION The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		PC0078400	PC0081600	PC007664
	Sample Date		Client Info		29 May 2024	26 Feb 2024	15 Nov 20
	Machine Age	kms	Client Info		562217	548538	533366
	Oil Age	kms	Client Info		13679	14888	14758
	Filter Age	kms	Client Info		13679	14888	14758
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Change
	Sample Status				MARGINAL	NORMAL	MARGINA
WEAR	Iron	ppm	ASTM D5185(m)	>100	40	31	10
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	1	<1	<1
	Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
	Titanium	ppm	ASTM D5185(m)		0	0	0
	Silver	ppm	ASTM D5185(m)	>3	0	0	<1
	Aluminum	ppm	ASTM D5185(m)	>20	2	3	1
	Lead	ppm	ASTM D5185(m)	>40	0	0	0
	Copper	ppm	ASTM D5185(m)	>330	1	1	1
	Tin	ppm	ASTM D5185(m)	>15	0	0	0
	Vanadium	ppm	ASTM D5185(m)		0	0	0
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	9	8	8
Light fuel dilution occurring. No other contaminants were detected in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
	Fuel	%	ASTM D7593*	>5	▲ 3.3	<1.0	A 3
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	ASTM D7844*	>3	0.4	0.6	0.1
	Nitration	Abs/cm	ASTM D7624*	>20	11.1	10.0	6.8
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	20.9	18.9
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		39	22	5
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	0	2	2	3
	Barium	ppm	ASTM D5185(m)	0	0	<1	<1
	Molybdenum	ppm	ASTM D5185(m)	60	64	61	57
	Manganese	ppm	ASTM D5185(m)	0	<1	0	0
	Magnesium	ppm	ASTM D5185(m)	1010	1008	1006	935
	Calcium	ppm	ASTM D5185(m)		1140	1132	1029
	Phosphorus	ppm	ASTM D5185(m)		1072	1001	963
	Zinc	ppm	ASTM D5185(m)		1246	1226	1160
	Sulfur	ppm	ASTM D5185(m)		2398	2450	2475
	Oxidation	Abs/.1mm	ASTM D7414*		20.8	17.8	15.0
	Visc @ 40°C	cSt	ASTM D7279(m)		93.3	100	91.9
	Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.2	13.9	13.3

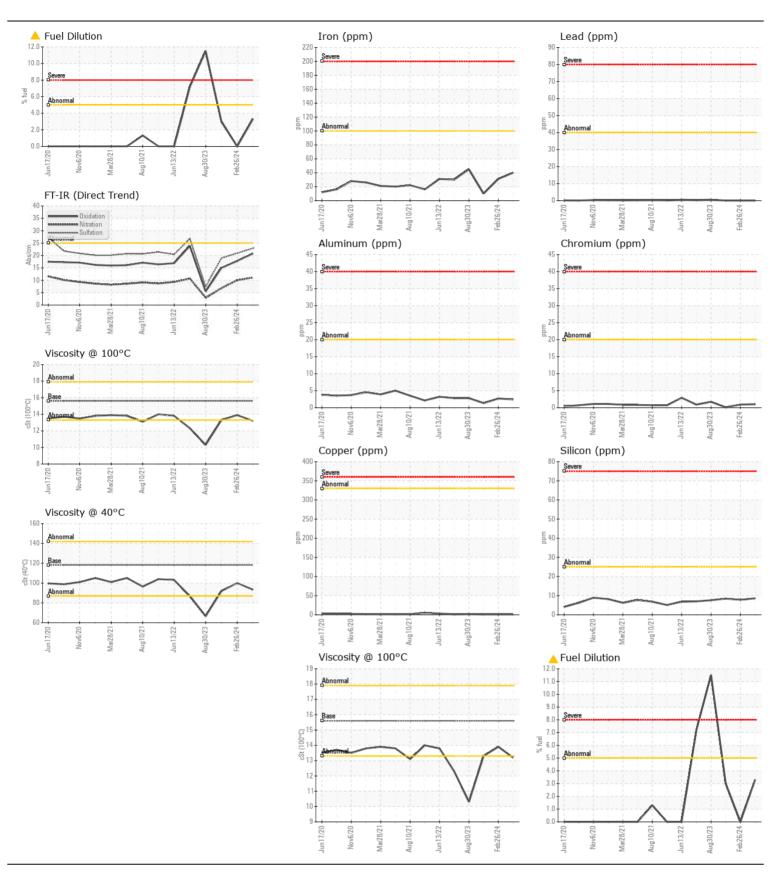
Viscosity Index (VI) Scale ASTM D2270* 139

144

140

Submitted By: Dan Finlay

140





CALA ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : 05 Jun 2024 : PC0078400 Received Lab Number : 02639823 **Tested** : 07 Jun 2024 Unique Number : 5788985 : 07 Jun 2024 - Wes Davis Diagnosed

Test Package: MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI)

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.

Metrobus Transit 25 Messenger Drive St. John's, NL CA A1B 0H6 Contact: Danny Oliver

danny.oliver@metrobus.com T: (709)570-2025

F: