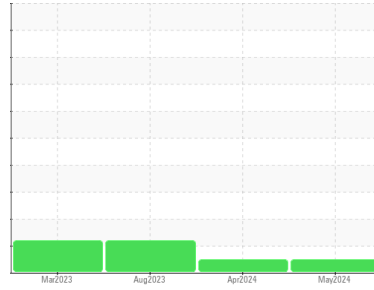




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

478

Component

Diesel Engine

Fluid

PETRO CANADA DURON HP 15W40 (--- 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		WC0905950	WC0905969	WC0792649
Sample Date	Client Info		30 May 2024	04 Apr 2024	18 Aug 2023
Machine Age	mls	Client Info	142524	139104	129740
Oil Age	mls	Client Info	0	5000	5000
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
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 >100	43	21	58
Chromium	ppm	ASTM D5185m >20	2	<1	2
Nickel	ppm	ASTM D5185m >4	<1	<1	1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >3	0	0	1
Aluminum	ppm	ASTM D5185m >20	7	5	5
Lead	ppm	ASTM D5185m >40	2	<1	3
Copper	ppm	ASTM D5185m >330	1	0	2
Tin	ppm	ASTM D5185m >15	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	<1
Cadmium	ppm	ASTM D5185m	<1	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	4	5	6
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	59	55	62
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	893	863	842
Calcium	ppm	ASTM D5185m	1228	1159	1155
Phosphorus	ppm	ASTM D5185m	991	1030	972
Zinc	ppm	ASTM D5185m	1268	1226	1189
Sulfur	ppm	ASTM D5185m	3378	3575	2851

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	4	5
Sodium	ppm	ASTM D5185m	4	3	9
Potassium	ppm	ASTM D5185m >20	24	20	▲ 149

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.9	1	1.9
Nitration	Abs/cm	*ASTM D7624 >20	8.4	6.6	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.3	19.1	22.4

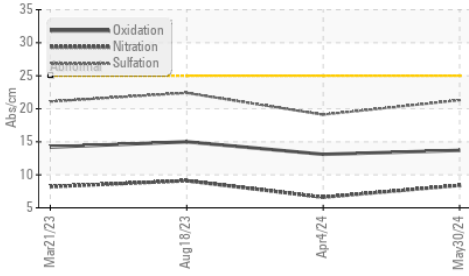
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.7	13.1	15.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.8	9.3	8.1

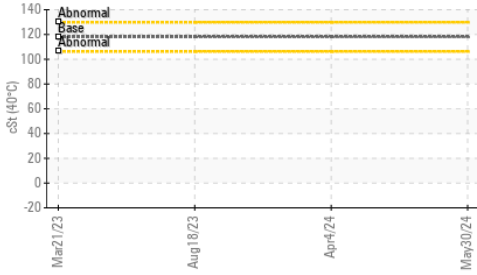


OIL ANALYSIS REPORT

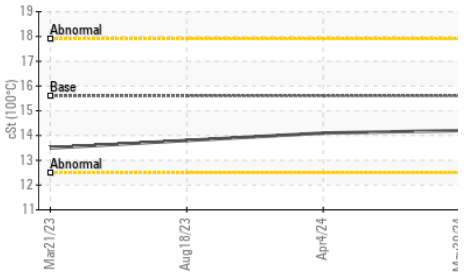
FT-IR (Direct Trend)



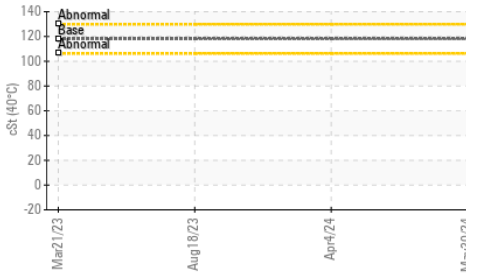
Viscosity @ 40°C



Viscosity @ 100°C



Viscosity @ 40°C



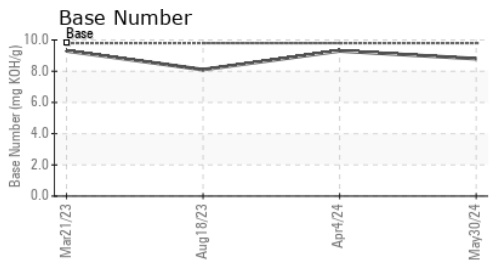
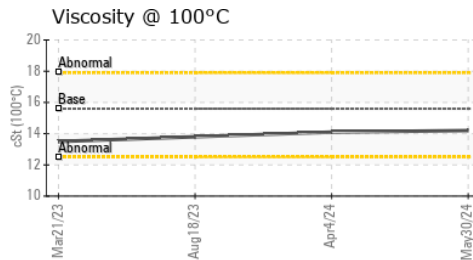
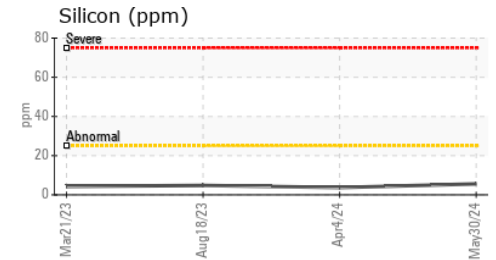
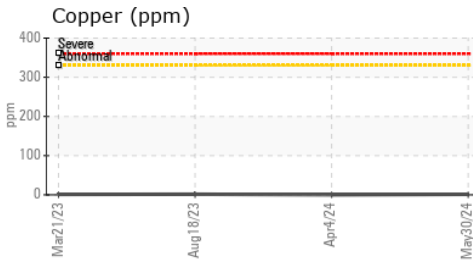
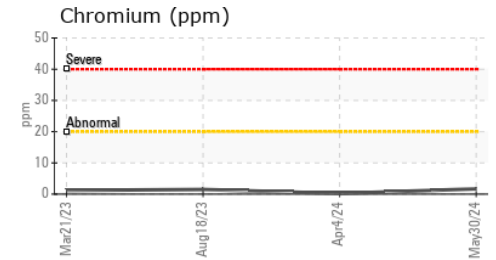
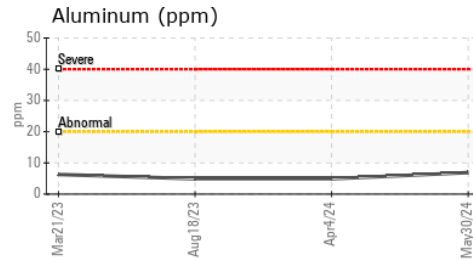
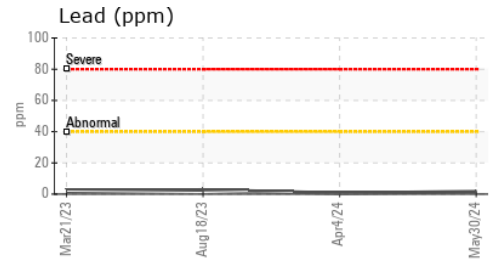
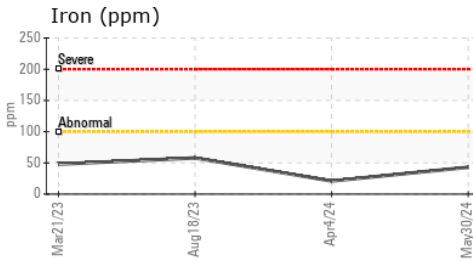
Viscosity @ 100°C



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	14.2	14.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0905950

Lab Number : 06207263

Unique Number : 11074724

Test Package : MOB 1 (Additional Tests: KV40, TBN)

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)

Received : 11 Jun 2024

Tested : 14 Jun 2024

Diagnosed : 14 Jun 2024 - Sean Felton

WAYNE CO SCHOOL BUS GARAGE

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GOLDSBORO, NC

US 27530

Contact: BRANDON BRIGGS

brandonbriggs@wcps.org

T:

F: