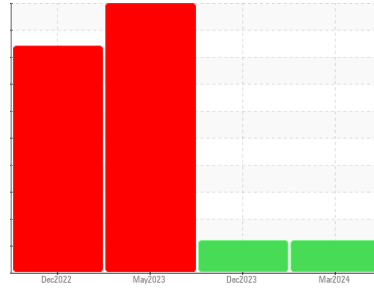




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id

510

Component

Diesel Engine

Fluid

PETRO CANADA DURON HP 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

Sodium and/or potassium levels remain high.

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		WC0906258	WC0792695	WC0792785
Sample Date	Client Info		22 Mar 2024	14 Dec 2023	05 May 2023
Machine Age	mls	Client Info	143546	139480	129424
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			ABNORMAL	ABNORMAL	SEVERE

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	38	24	▲ 120
Chromium	ppm	ASTM D5185m	>20	3	3	▲ 20
Nickel	ppm	ASTM D5185m	>4	<1	<1	2
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	▲ 12
Lead	ppm	ASTM D5185m	>40	<1	2	14
Copper	ppm	ASTM D5185m	>330	2	3	21
Tin	ppm	ASTM D5185m	>15	0	<1	1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		9	5	13
Barium	ppm	ASTM D5185m		0	10	0
Molybdenum	ppm	ASTM D5185m		61	59	82
Manganese	ppm	ASTM D5185m		<1	0	2
Magnesium	ppm	ASTM D5185m		820	837	715
Calcium	ppm	ASTM D5185m		1234	1024	1335
Phosphorus	ppm	ASTM D5185m		857	1054	885
Zinc	ppm	ASTM D5185m		1187	1122	1193
Sulfur	ppm	ASTM D5185m		3346	3302	3518

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	4	3	8
Sodium	ppm	ASTM D5185m		6	4	▲ 68
Potassium	ppm	ASTM D5185m	>20	▲ 127	▲ 113	▲ 1244
Glycol	%	*ASTM D2982		NEG	NEG	▲ 0.10

INFRA-RED

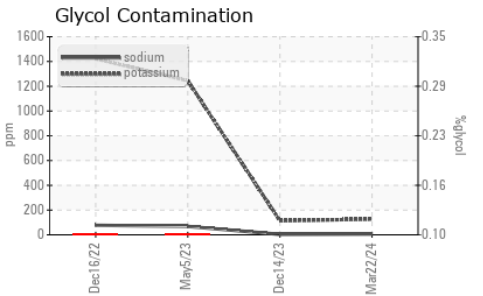
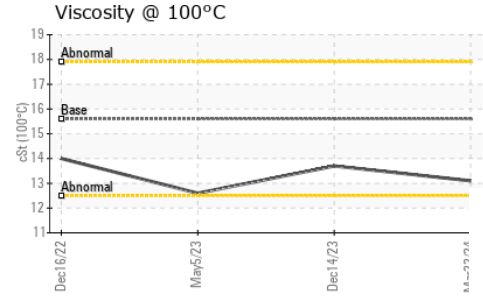
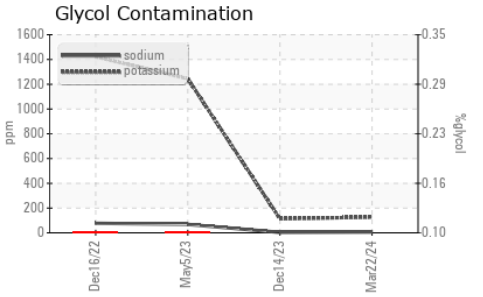
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	1.1	0.6	1.5
Nitration	Abs/cm	*ASTM D7624	>20	12.4	9.2	16.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	20.0	29.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	16.4	26.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.7	8.4	7.0



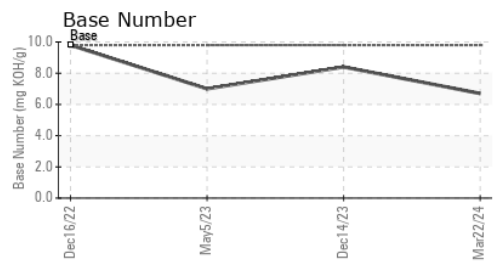
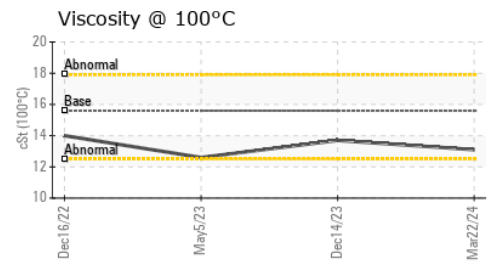
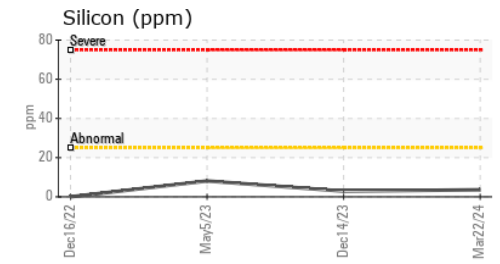
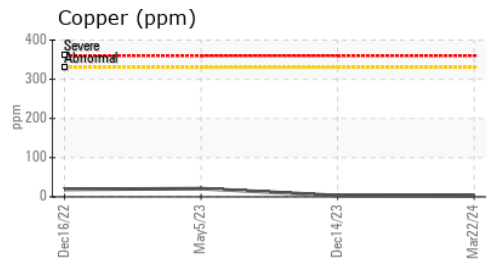
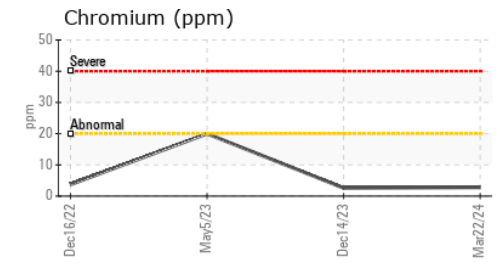
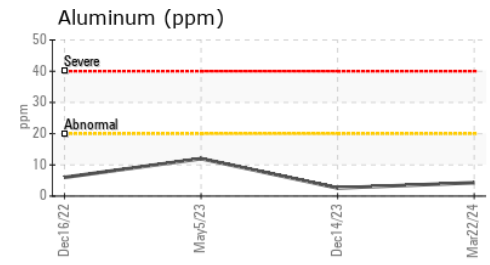
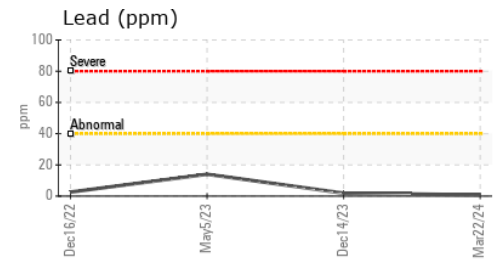
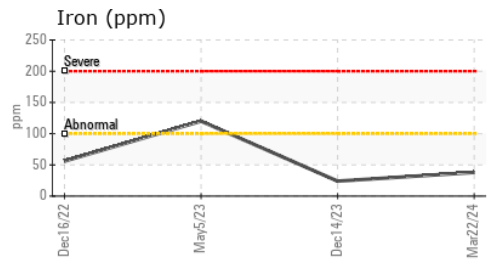
OIL ANALYSIS REPORT



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	15.6	13.1	13.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906258 **Received** : 28 Mar 2024
Lab Number : **06132655** **Tested** : 02 Apr 2024
Unique Number : 10952120 **Diagnosed** : 02 Apr 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

WAYNE CO SCHOOL BUS GARAGE
 1603 SALEM CHURCH RD
 GOLDSBORO, NC
 US 27530
 Contact: BRANDON BRIGGS
 brandonbriggs@wcps.org

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)