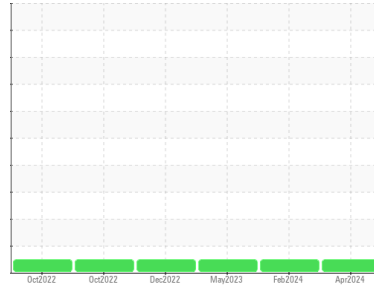




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

114

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			WC0905966	WC0906243	WC0792748
Sample Date	Client Info			05 Apr 2024	14 Feb 2024	24 May 2023
Machine Age	mls	Client Info		110491	155262	0
Oil Age	mls	Client Info		5000	0	5000
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

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	23	10	16
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	3	2
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	1	0	<1
Tin	ppm	ASTM D5185m	>15	1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		3	7	7
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		87	57	62
Manganese	ppm	ASTM D5185m		1	0	<1
Magnesium	ppm	ASTM D5185m		1383	864	835
Calcium	ppm	ASTM D5185m		1573	986	1084
Phosphorus	ppm	ASTM D5185m		1462	969	981
Zinc	ppm	ASTM D5185m		1814	1186	1164
Sulfur	ppm	ASTM D5185m		4726	2887	2933

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	2	3
Sodium	ppm	ASTM D5185m		3	0	0
Potassium	ppm	ASTM D5185m	>20	6	<1	4

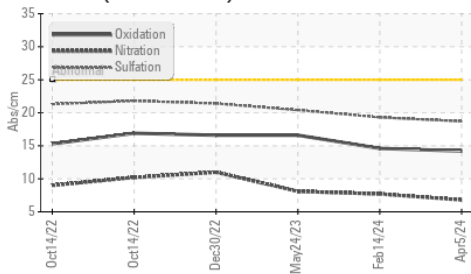
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.8	0.9
Nitration	Abs/cm	*ASTM D7624	>20	6.8	7.7	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	19.3	20.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	14.6	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.6	8.8	8.8

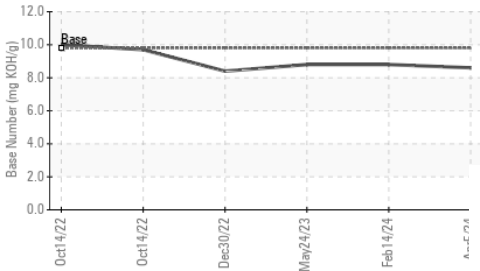


OIL ANALYSIS REPORT

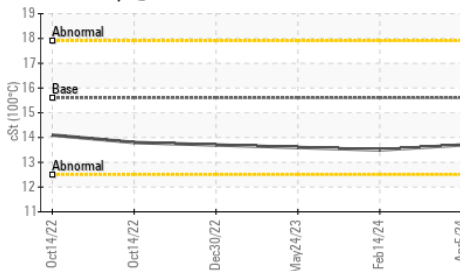
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

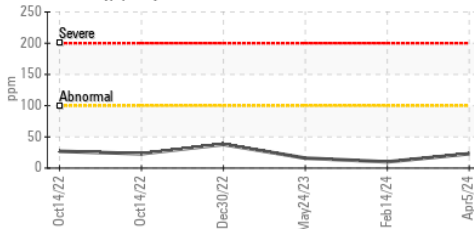


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

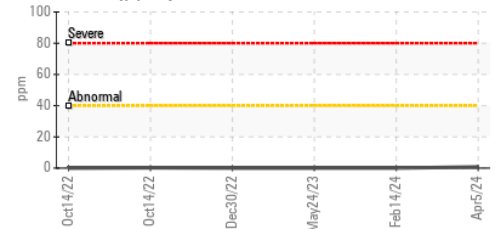
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	13.7	13.5

GRAPHS

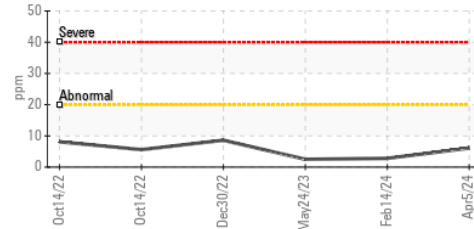
Iron (ppm)



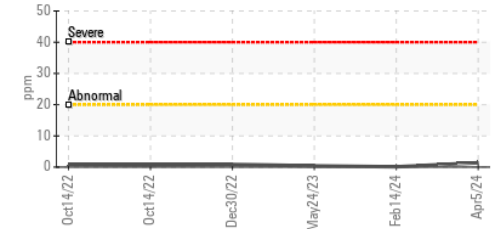
Lead (ppm)



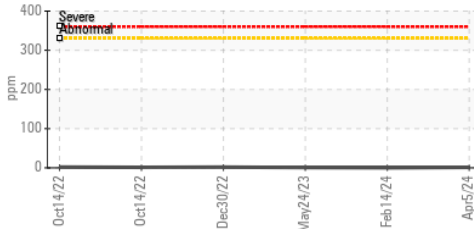
Aluminum (ppm)



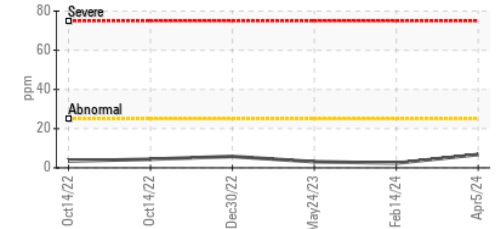
Chromium (ppm)



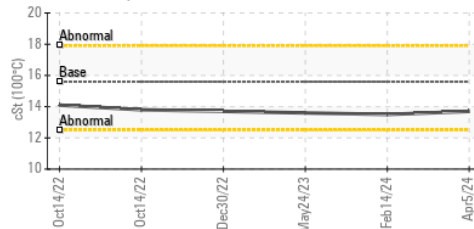
Copper (ppm)



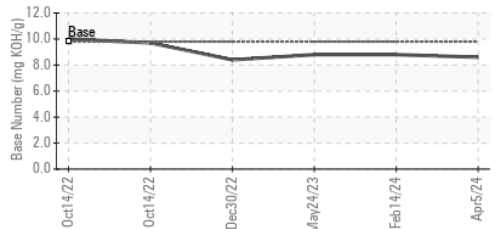
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0905966
Lab Number : 06143666
Unique Number : 10968474
Test Package : MOB 1 (Additional Tests: TBN)

Received : 09 Apr 2024
Tested : 10 Apr 2024
Diagnosed : 12 Apr 2024 - Jonathan Hester

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)

T:
F: