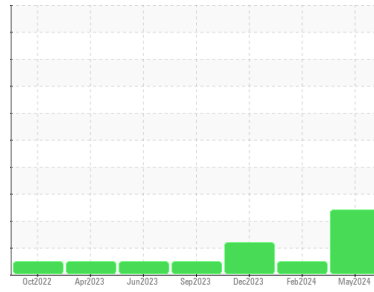




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
BLUE BIRD 116

Component
Diesel Engine

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

DIAGNOSIS

▲ Recommendation

We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of fuel present 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		WC0905976	WC0905889	WC0792744
Sample Date	Client Info		30 May 2024	13 Feb 2024	18 Dec 2023
Machine Age	mls	Client Info	154609	0	139497
Oil Age	mls	Client Info	0	0	5000
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			SEVERE	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 >100	2	29	17
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	<1	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	10	5	4
Lead	ppm	ASTM D5185m >40	0	0	2
Copper	ppm	ASTM D5185m >330	<1	1	<1
Tin	ppm	ASTM D5185m >15	<1	<1	0
Vanadium	ppm	ASTM D5185m	1	0	<1
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	6	9
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	8	57	62
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m	53	929	910
Calcium	ppm	ASTM D5185m	79	1111	1054
Phosphorus	ppm	ASTM D5185m	44	937	947
Zinc	ppm	ASTM D5185m	41	1195	1239
Sulfur	ppm	ASTM D5185m	56	2871	3042

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	4	3
Sodium	ppm	ASTM D5185m	30	2	2
Potassium	ppm	ASTM D5185m >20	6	9	▲ 42
Fuel	%	ASTM D3524 >5	▲ 8.2	<1.0	<1.0

INFRA-RED

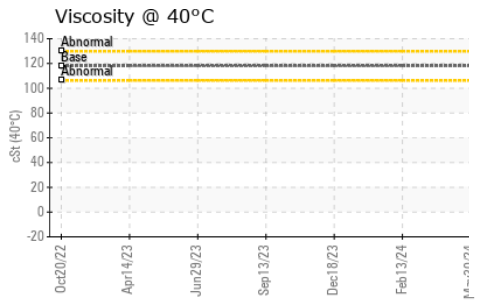
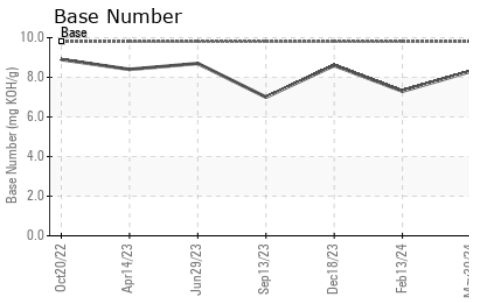
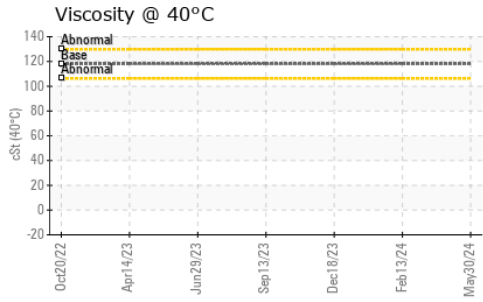
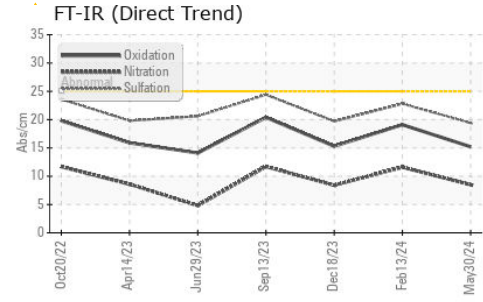
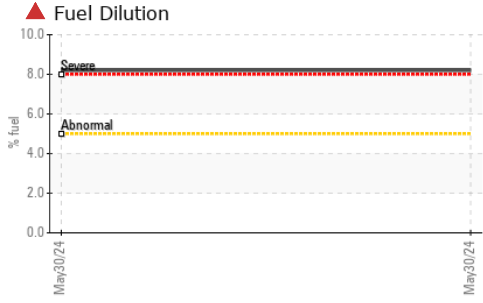
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.9	1.5	0.8
Nitration	Abs/cm	*ASTM D7624 >20	8.5	11.6	8.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.4	22.8	19.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.2	19.1	15.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.3	7.3	8.6



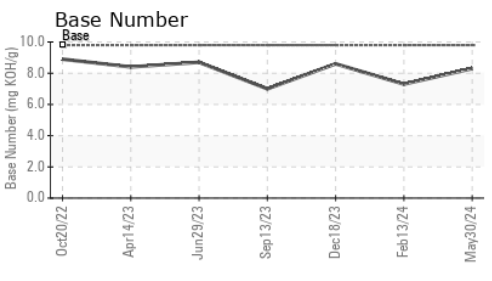
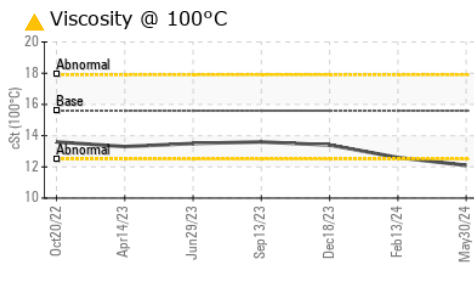
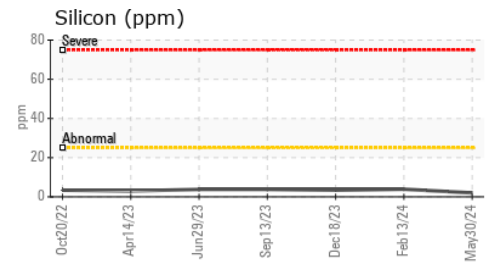
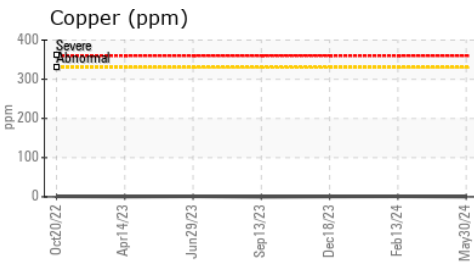
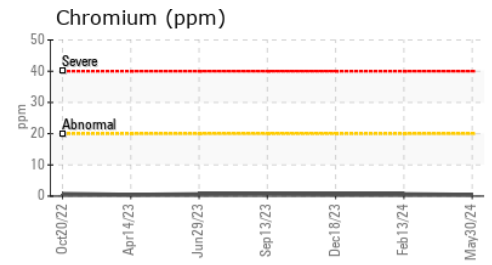
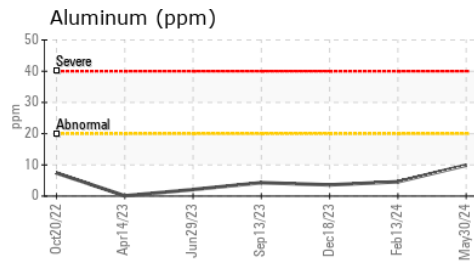
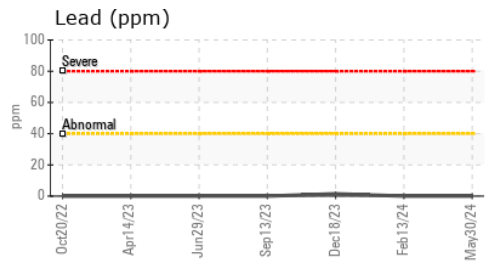
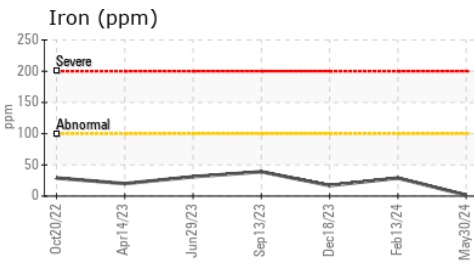
OIL ANALYSIS REPORT



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	▲ 12.1	12.6	13.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0905976 **Received** : 11 Jun 2024
Lab Number : 06207338 **Tested** : 18 Jun 2024
Unique Number : 11074799 **Diagnosed** : 18 Jun 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN, KV40)

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)