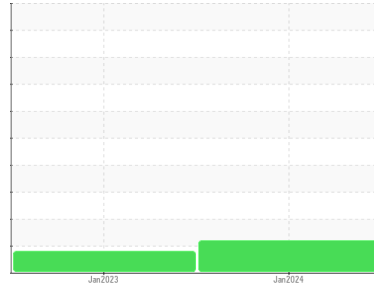




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
4003

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0867931	WC0740633	---
Sample Date	Client Info		17 Jan 2024	13 Jan 2023	---
Machine Age	mls	Client Info	0	34019	---
Oil Age	mls	Client Info	0	2800	---
Oil Changed	Client Info		Not Chngd	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	18	58
Chromium	ppm	ASTM D5185m	>20	<1	4
Nickel	ppm	ASTM D5185m	>4	0	1
Titanium	ppm	ASTM D5185m		0	0
Silver	ppm	ASTM D5185m	>3	0	<1
Aluminum	ppm	ASTM D5185m	>20	6	▲ 103
Lead	ppm	ASTM D5185m	>40	0	<1
Copper	ppm	ASTM D5185m	>330	<1	3
Tin	ppm	ASTM D5185m	>15	<1	<1
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		8	15
Barium	ppm	ASTM D5185m		0	0
Molybdenum	ppm	ASTM D5185m		57	54
Manganese	ppm	ASTM D5185m		<1	<1
Magnesium	ppm	ASTM D5185m		647	849
Calcium	ppm	ASTM D5185m		1300	1062
Phosphorus	ppm	ASTM D5185m		877	998
Zinc	ppm	ASTM D5185m		1170	1199
Sulfur	ppm	ASTM D5185m		2819	3806

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	6
Sodium	ppm	ASTM D5185m		<1	2
Potassium	ppm	ASTM D5185m	>20	2	4
Fuel	%	ASTM D3524	>5	▲ 6.8	<1.0

INFRA-RED

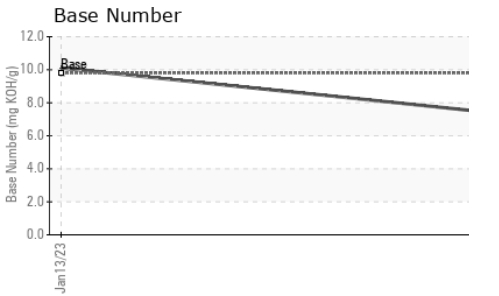
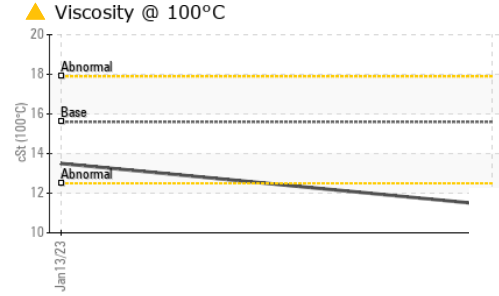
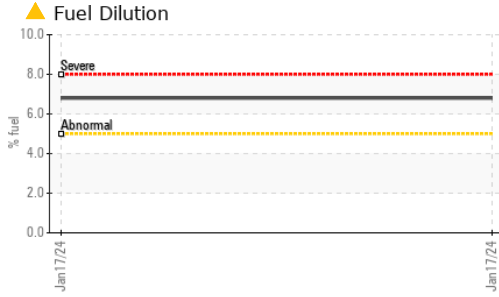
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.9	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.1	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	17.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	12.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.4	10.1



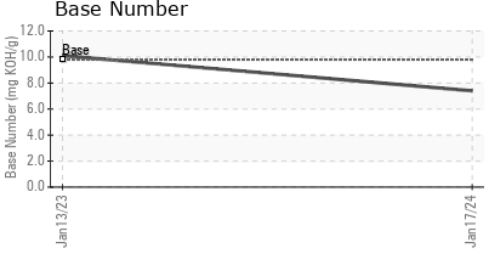
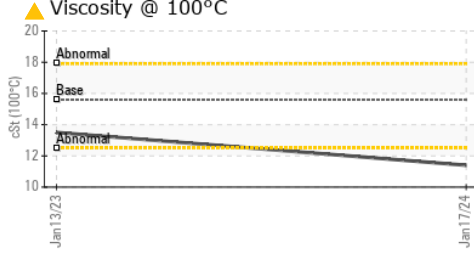
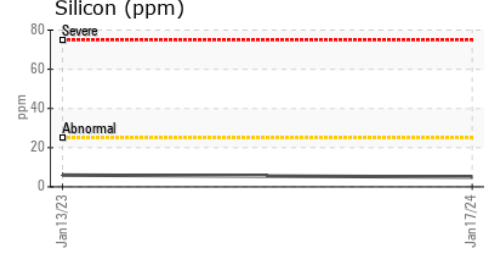
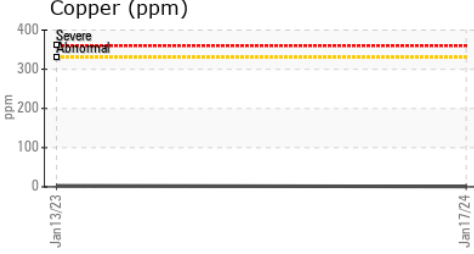
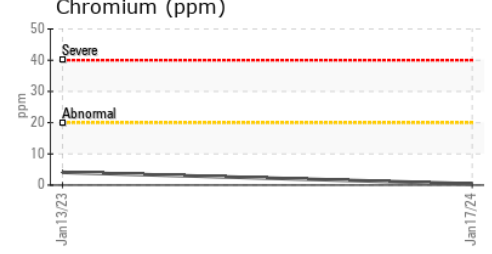
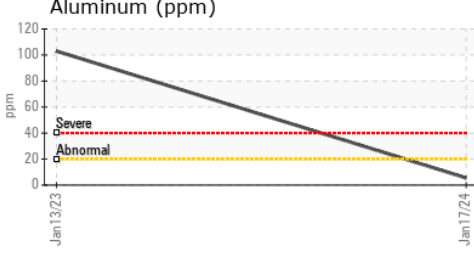
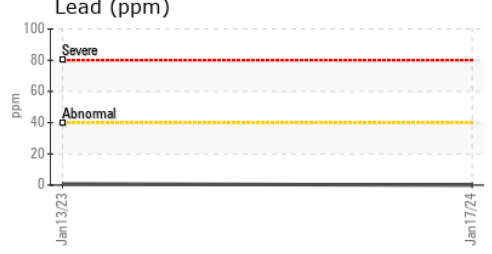
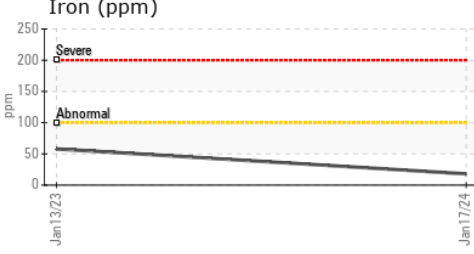
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	▲ 11.4	13.5	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0867931 **Received** : 30 Jan 2024
Lab Number : 06074514 **Diagnosed** : 01 Feb 2024
Unique Number : 10856605 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

ANSON CO SCHOOL BUS GARAGE
 89 BOGGAN CUT RD
 WADESBORO, NC
 US 28135
 Contact: MATT POWELL
 powell.berkeley@anson.k12.nc.us

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)