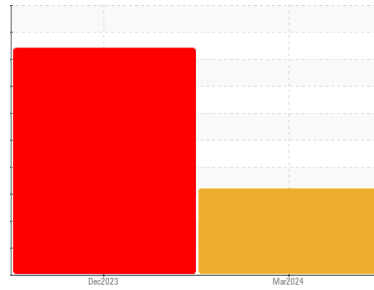


OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
1324146
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Wear

Aluminum ppm levels are abnormal. Piston wear is indicated.

Contamination

There is a high 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 as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0119169	PCA0111362	---
Sample Date	Client Info		25 Mar 2024	27 Dec 2023	---
Machine Age	mls	Client Info	206208	204355	---
Oil Age	mls	Client Info	0	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			SEVERE	SEVERE	---

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	38	74	---
Chromium	ppm	ASTM D5185m >20	3	6	---
Nickel	ppm	ASTM D5185m >4	<1	<1	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m >3	<1	0	---
Aluminum	ppm	ASTM D5185m >20	39	86	---
Lead	ppm	ASTM D5185m >40	1	2	---
Copper	ppm	ASTM D5185m >330	4	6	---
Tin	ppm	ASTM D5185m >15	<1	0	---
Vanadium	ppm	ASTM D5185m	<1	<1	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	24	7	---
Barium	ppm	ASTM D5185m 0	0	0	---
Molybdenum	ppm	ASTM D5185m 50	64	61	---
Manganese	ppm	ASTM D5185m 0	<1	1	---
Magnesium	ppm	ASTM D5185m 950	798	743	---
Calcium	ppm	ASTM D5185m 1050	1051	976	---
Phosphorus	ppm	ASTM D5185m 995	906	785	---
Zinc	ppm	ASTM D5185m 1180	1125	994	---
Sulfur	ppm	ASTM D5185m 2600	3060	2484	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	7	---
Sodium	ppm	ASTM D5185m	9	22	---
Potassium	ppm	ASTM D5185m >20	8	12	---
Fuel	%	ASTM D3524 >5	10.3	12.2	---

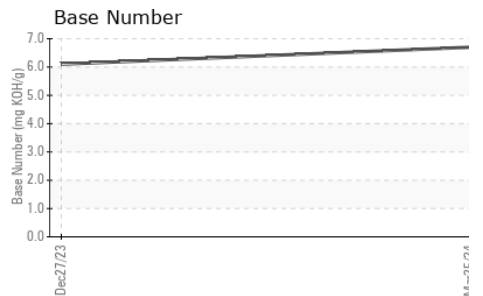
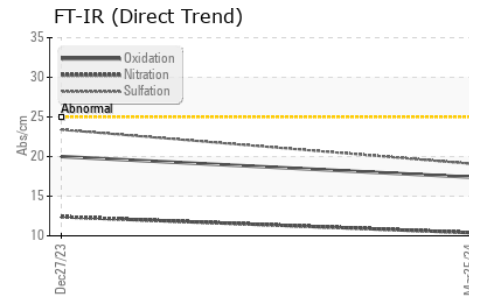
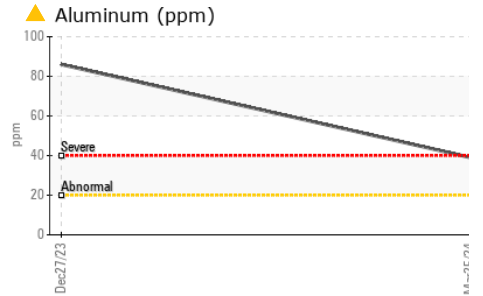
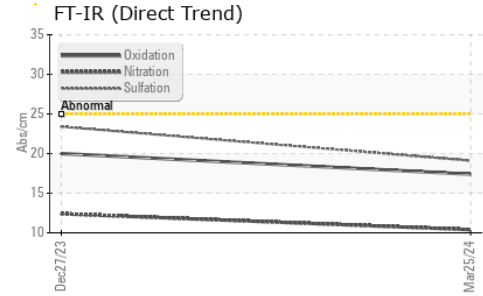
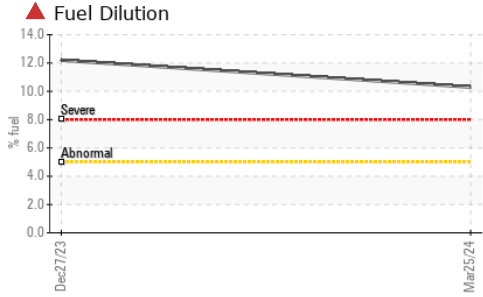
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.6	1.3	---
Nitration	Abs/cm	*ASTM D7624 >20	10.4	12.4	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.1	23.4	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.4	20.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	6.7	6.1	---

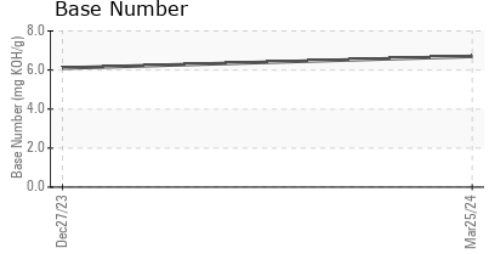
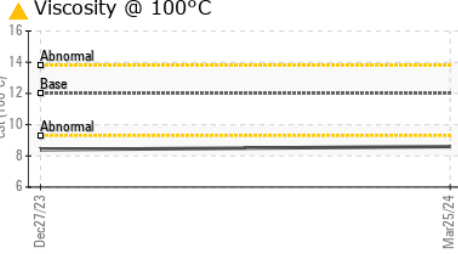
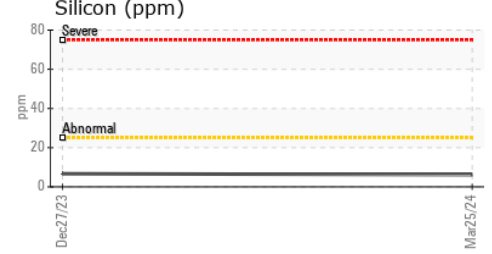
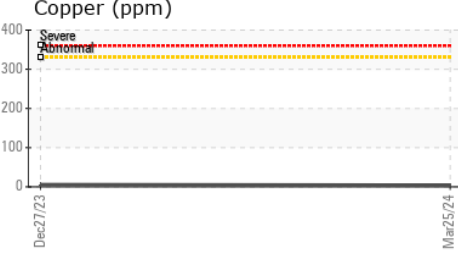
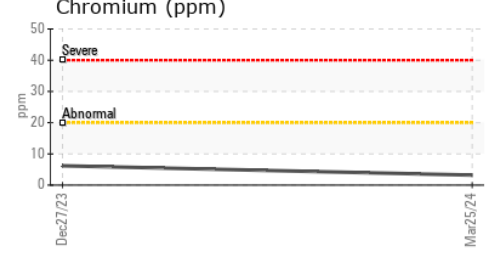
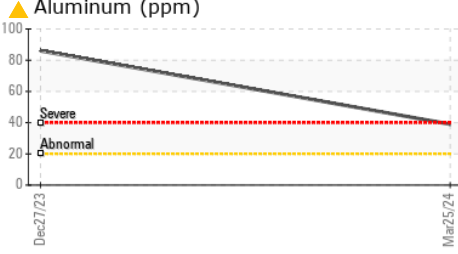
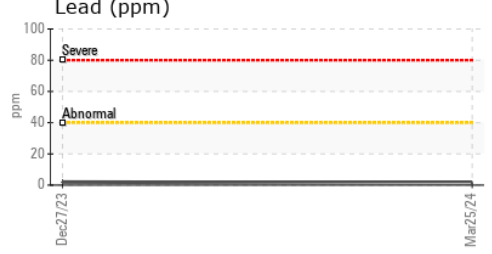
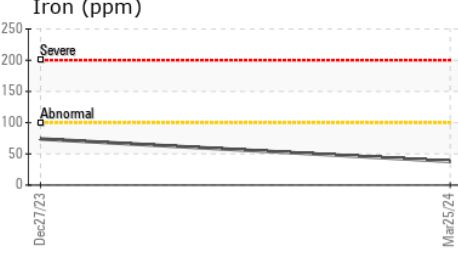
OIL ANALYSIS REPORT



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	12.00	▲ 8.6	▲ 8.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0119169 **Received** : 22 May 2024
Lab Number : 06188492 **Tested** : 28 May 2024
Unique Number : 11045244 **Diagnosed** : 28 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

MILLER TRUCK LEASING #129
 3 LINDEN AVE E
 JERSEY CITY, NJ
 US 07305
 Contact: BILL CUCCIA
 wcuccia@millertransgroup.com

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)