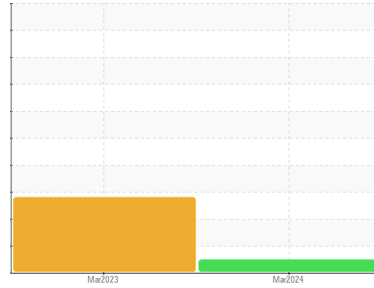


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL


Machine Id
738591
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS
Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0116932	PCA0094458	---
Sample Date	Client Info		01 Mar 2024	21 Mar 2023	---
Machine Age	mls	Client Info	0	72561	---
Oil Age	mls	Client Info	0	72561	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	---
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	91	▲ 159
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	36	80
Lead	ppm	ASTM D5185m	>40	0	5
Copper	ppm	ASTM D5185m	>330	68	▲ 367
Tin	ppm	ASTM D5185m	>15	2	7
Vanadium	ppm	ASTM D5185m		<1	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	5	18
Barium	ppm	ASTM D5185m	0	2	0
Molybdenum	ppm	ASTM D5185m	50	65	37
Manganese	ppm	ASTM D5185m	0	2	5
Magnesium	ppm	ASTM D5185m	950	867	530
Calcium	ppm	ASTM D5185m	1050	1344	1898
Phosphorus	ppm	ASTM D5185m	995	1056	706
Zinc	ppm	ASTM D5185m	1180	1249	1052
Sulfur	ppm	ASTM D5185m	2600	2518	1716

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	12
Sodium	ppm	ASTM D5185m		2	8
Potassium	ppm	ASTM D5185m	>20	81	174

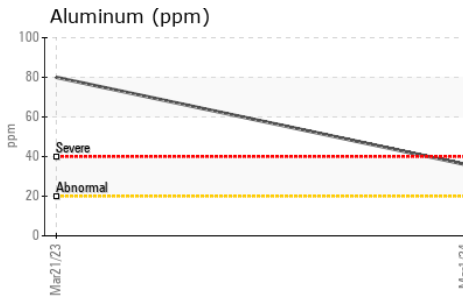
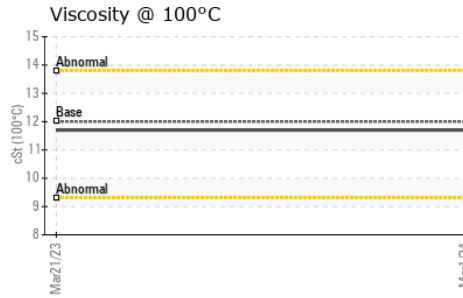
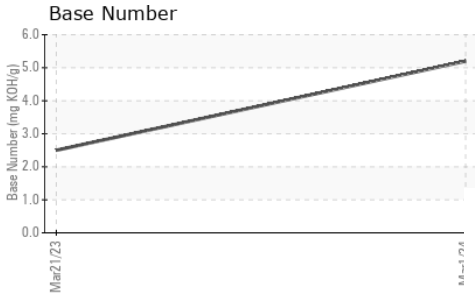
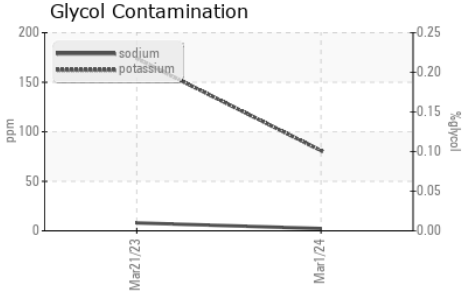
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	2.2	1.9
Nitration	Abs/cm	*ASTM D7624	>20	14.5	18.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.7	29.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.8	35.1
Base Number (BN)	mg KOH/g	ASTM D2896		5.2	▲ 2.5

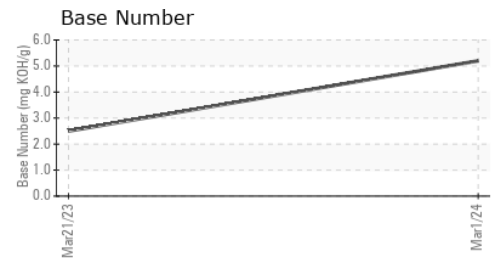
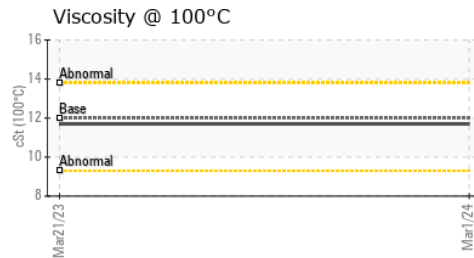
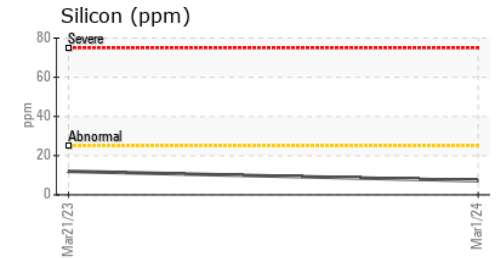
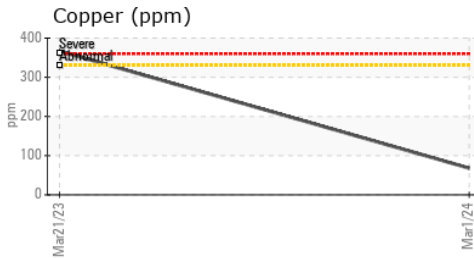
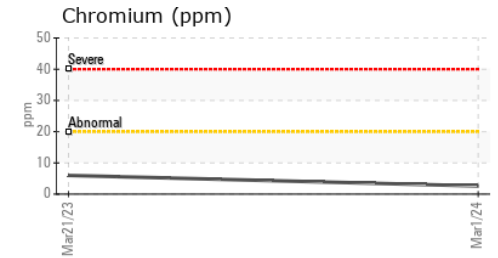
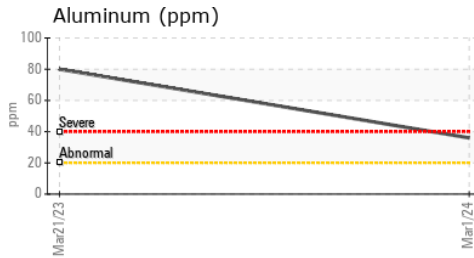
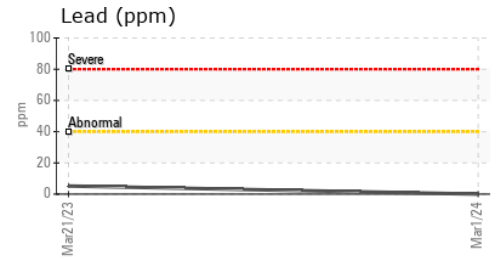
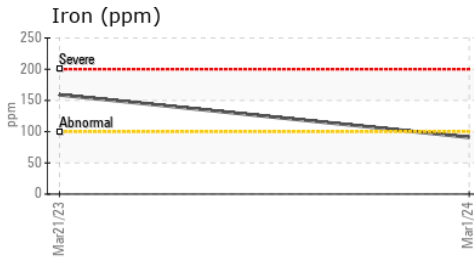
OIL ANALYSIS REPORT



PARAMETER	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	11.7	11.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0116932 **Received** : 21 Mar 2024
Lab Number : 06124524 **Tested** : 21 Mar 2024
Unique Number : 10938675 **Diagnosed** : 23 Mar 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

MILLER TRUCK LEASING #114
 63 REPAUPO STATION ROAD
 LOGAN TOWNSHIP, NJ
 US 08085

Contact: ED DAVIS
 edavis@millertransgroup.com
 T: (856)214-3521
 F: (856)214-3663

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)