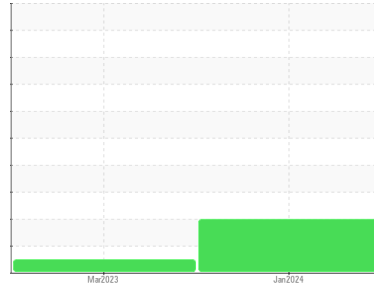


OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
738604
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

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

Wear

Cylinder, crank, or cam shaft wear is indicated. All other 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 level is low. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info		PCA0110148	PCA0091394	---
Sample Date	Client Info		09 Jan 2024	02 Mar 2023	---
Machine Age	mls	Client Info	107039	37198	---
Oil Age	mls	Client Info	15000	37198	---
Oil Changed		Client Info	Changed	Changed	---
Sample Status			ABNORMAL	NORMAL	---

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	0.0	---

WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>100	▲ 102	153	---
Chromium	ppm	ASTM D5185m	>20	4	8	---
Nickel	ppm	ASTM D5185m	>4	1	3	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	26	72	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	117	312	---
Tin	ppm	ASTM D5185m	>15	3	11	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		<1	0	---

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185m	2	2	38	---
Barium	ppm	ASTM D5185m	0	<1	0	---
Molybdenum	ppm	ASTM D5185m	50	65	73	---
Manganese	ppm	ASTM D5185m	0	3	7	---
Magnesium	ppm	ASTM D5185m	950	910	876	---
Calcium	ppm	ASTM D5185m	1050	1281	2856	---
Phosphorus	ppm	ASTM D5185m	995	964	1169	---
Zinc	ppm	ASTM D5185m	1180	1178	1491	---
Sulfur	ppm	ASTM D5185m	2600	2183	2999	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>25	10	15	---
Sodium	ppm	ASTM D5185m		0	14	---
Potassium	ppm	ASTM D5185m	>20	81	199	---

INFRA-RED method limit/base current history1 history2

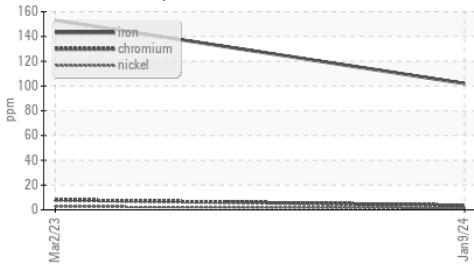
Soot %	%	*ASTM D7844	>3	1.8	0.9	---
Nitration	Abs/cm	*ASTM D7624	>20	15.9	11.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.4	24.1	---

FLUID DEGRADATION method limit/base current history1 history2

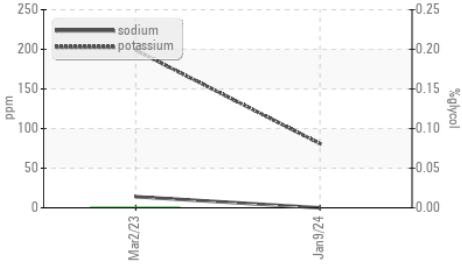
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.4	24.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		▲ 2.4	7.7	---

OIL ANALYSIS REPORT

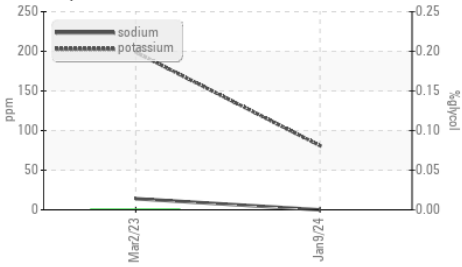
▲ Ferrous Alloys



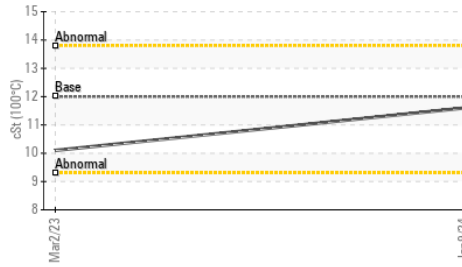
● Glycol Contamination



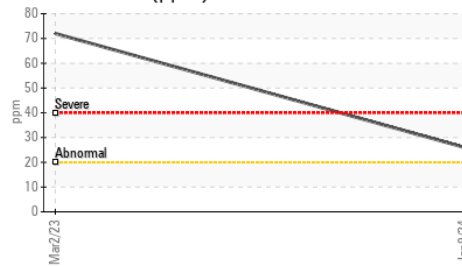
● Glycol Contamination



● Viscosity @ 100°C



● Aluminum (ppm)

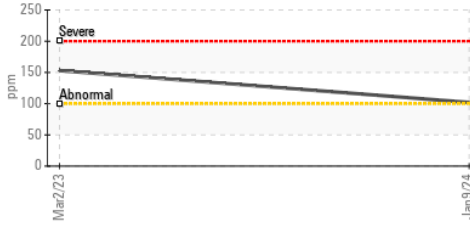


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	11.6	10.1

GRAPHS

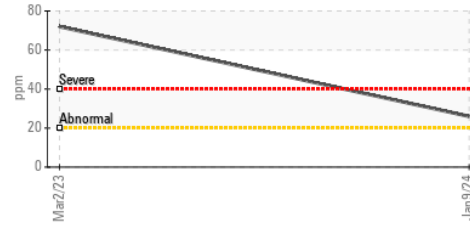
▲ Iron (ppm)



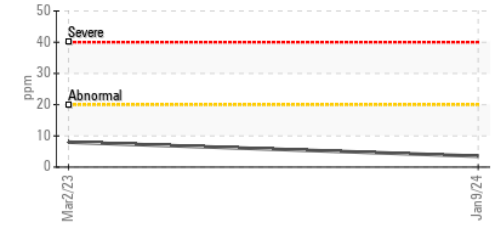
● Lead (ppm)



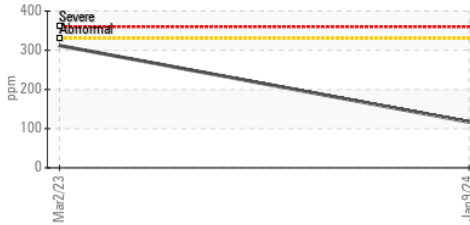
● Aluminum (ppm)



● Chromium (ppm)



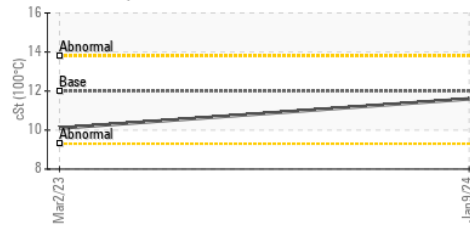
● Copper (ppm)



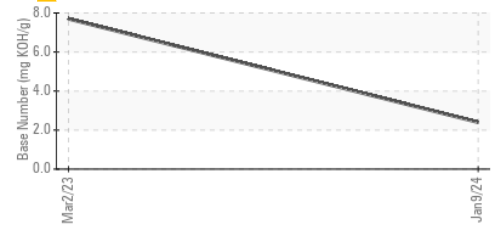
● Silicon (ppm)



● Viscosity @ 100°C



▲ Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0110148 **Received** : 08 Feb 2024
Lab Number : 06083398 **Tested** : 08 Feb 2024
Unique Number : 10870843 **Diagnosed** : 09 Feb 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

MILLER TRUCK LEASING #121
 107 HOW LANE
 NEW BRUNSWICK, NJ
 US 08901
 Contact: Anthony Cursi
 acursi@millertransgroup.com
 T: (732)358-4027
 F: (732)400-8475

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)