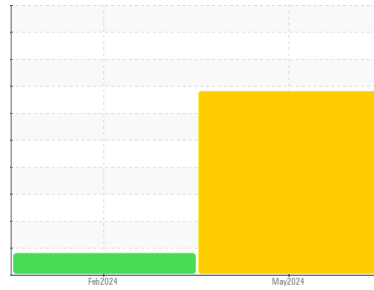


# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**1324141**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### ▲ Wear

Piston, ring and cylinder wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. 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			<b>PCA0119224</b>	PCA0111379	---
Sample Date	Client Info			<b>09 May 2024</b>	02 Feb 2024	---
Machine Age	mls	Client Info		<b>226694</b>	223823	---
Oil Age	mls	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	N/A	---
Sample Status				<b>SEVERE</b>	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2		<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>▲ 134</b>	67	---
Chromium	ppm	ASTM D5185m	>20	<b>7</b>	4	---
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m	>20	<b>▲ 197</b>	<b>▲ 105</b>	---
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>9</b>	5	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

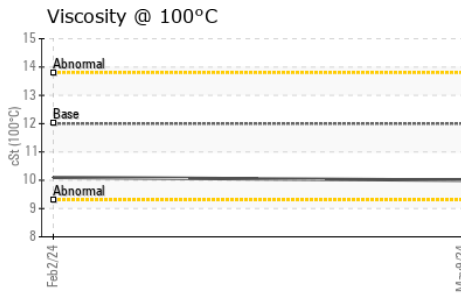
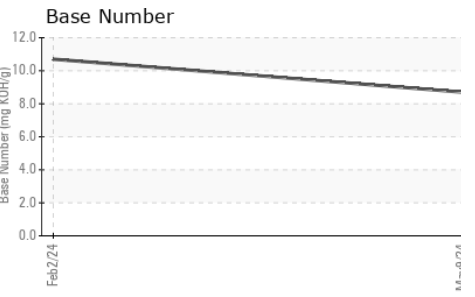
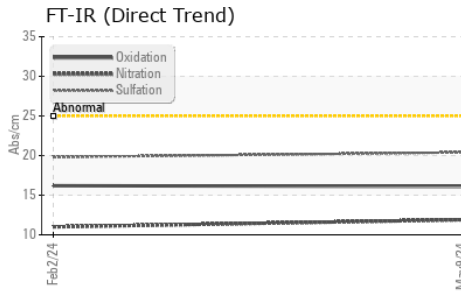
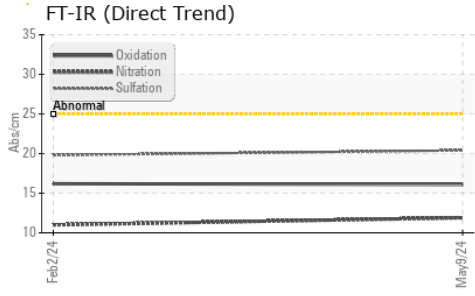
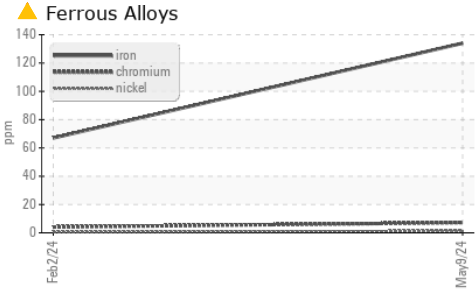
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>12</b>	13	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	50	<b>85</b>	67	---
Manganese	ppm	ASTM D5185m	0	<b>2</b>	1	---
Magnesium	ppm	ASTM D5185m	950	<b>1209</b>	903	---
Calcium	ppm	ASTM D5185m	1050	<b>1415</b>	1235	---
Phosphorus	ppm	ASTM D5185m	995	<b>1363</b>	1061	---
Zinc	ppm	ASTM D5185m	1180	<b>1660</b>	1231	---
Sulfur	ppm	ASTM D5185m	2600	<b>4606</b>	3580	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>14</b>	9	---
Sodium	ppm	ASTM D5185m		<b>2</b>	3	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1.7</b>	1.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.9</b>	11.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.4</b>	19.8	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	16.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.7</b>	10.7	---

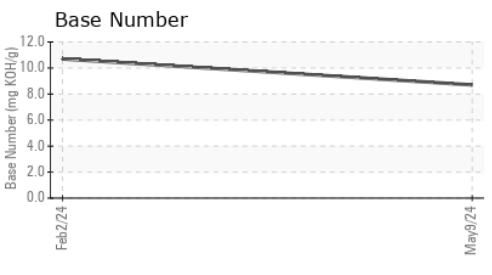
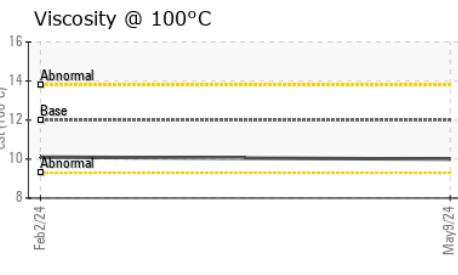
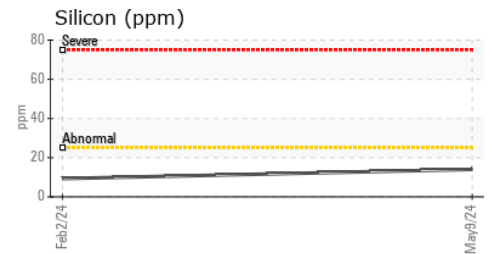
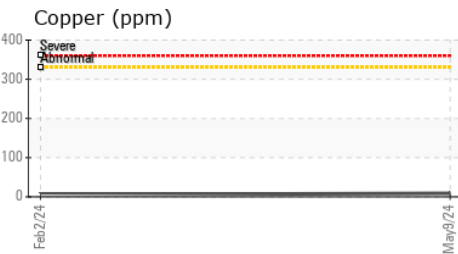
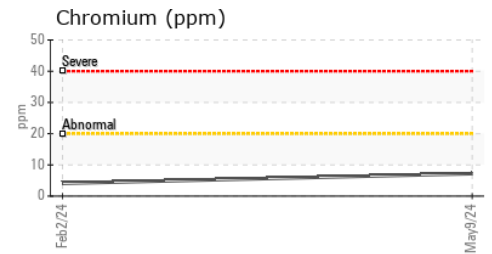
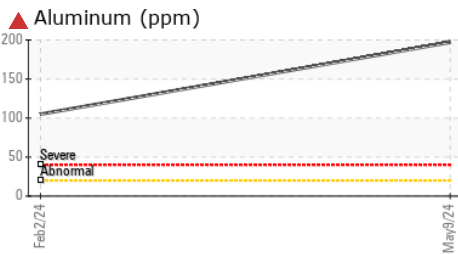
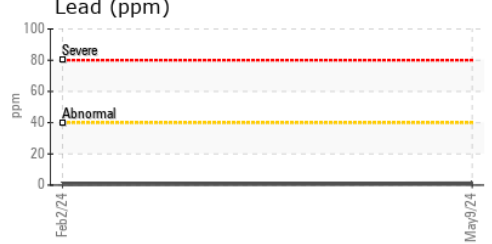
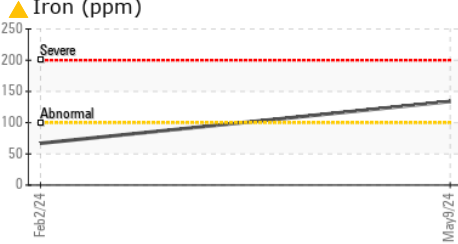
# OIL ANALYSIS REPORT



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	---

PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.0	10.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0119224 **Received** : 22 May 2024  
**Lab Number** : 06188499 **Tested** : 24 May 2024  
**Unique Number** : 11045251 **Diagnosed** : 28 May 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: 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)