

# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**742499**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

Metal levels are typical for a new component breaking in.

#### 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. 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 condition of the oil is acceptable for the time in service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0127016</b>	PCA0117058	---
Sample Date	Client Info		<b>23 May 2024</b>	30 Jan 2024	---
Machine Age	mls	Client Info	<b>20940</b>	10833	---
Oil Age	mls	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

### 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>48</b>	31	---
Chromium	ppm	ASTM D5185m >20	<b>3</b>	2	---
Nickel	ppm	ASTM D5185m >4	<b>2</b>	<1	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m >20	<b>27</b>	14	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	---
Copper	ppm	ASTM D5185m >330	<b>182</b>	71	---
Tin	ppm	ASTM D5185m >15	<b>4</b>	4	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>35</b>	51	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m 50	<b>41</b>	41	---
Manganese	ppm	ASTM D5185m 0	<b>2</b>	2	---
Magnesium	ppm	ASTM D5185m 950	<b>498</b>	508	---
Calcium	ppm	ASTM D5185m 1050	<b>1630</b>	1841	---
Phosphorus	ppm	ASTM D5185m 995	<b>708</b>	777	---
Zinc	ppm	ASTM D5185m 1180	<b>857</b>	903	---
Sulfur	ppm	ASTM D5185m 2600	<b>2169</b>	2320	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	6	---
Sodium	ppm	ASTM D5185m	<b>6</b>	8	---
Potassium	ppm	ASTM D5185m >20	<b>89</b>	54	---

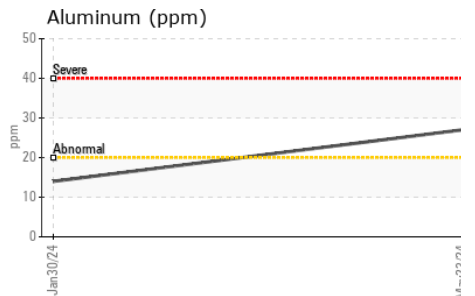
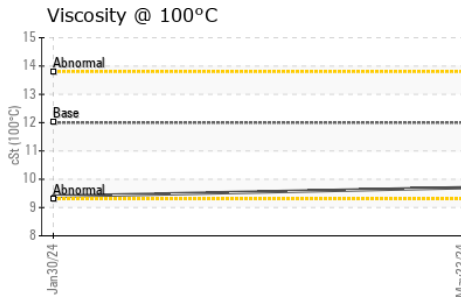
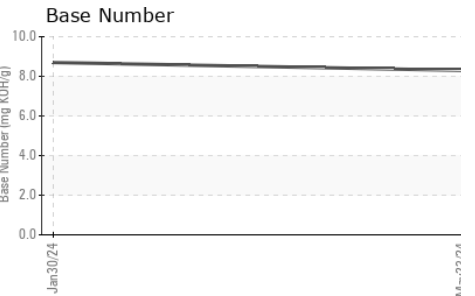
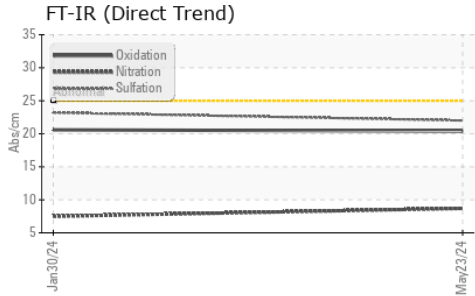
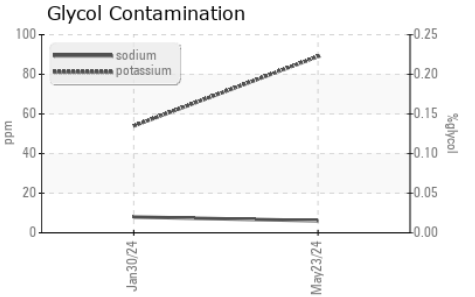
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.7</b>	7.5	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.0</b>	23.2	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.4</b>	20.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>8.3</b>	8.7	---

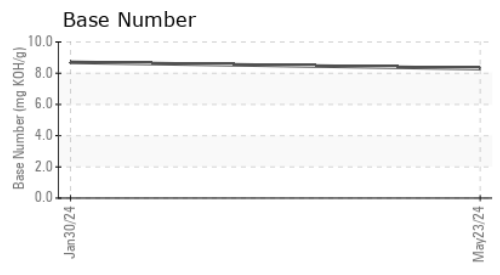
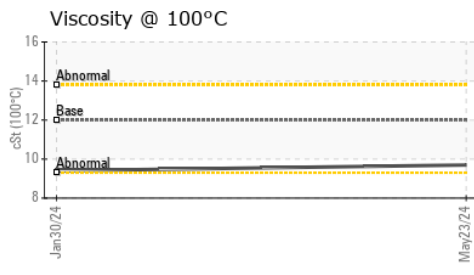
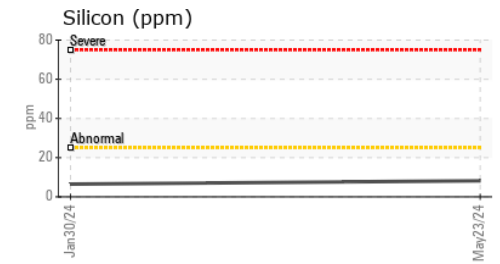
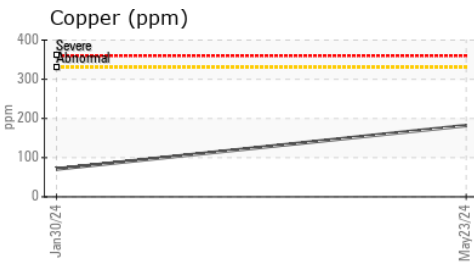
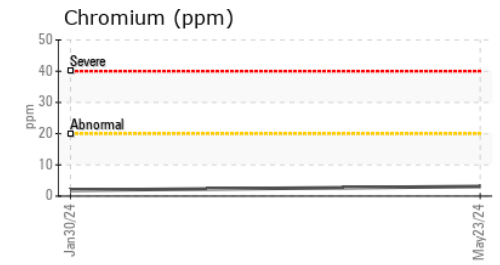
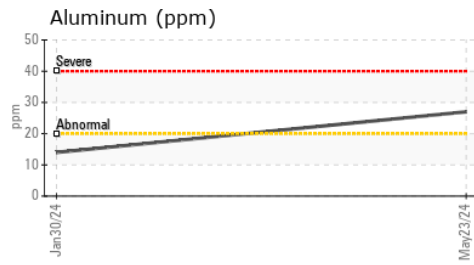
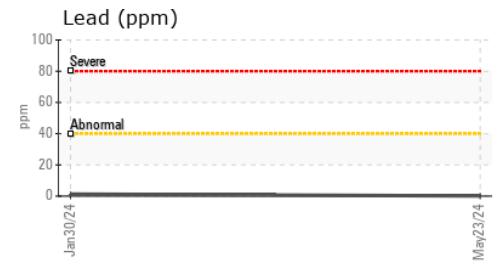
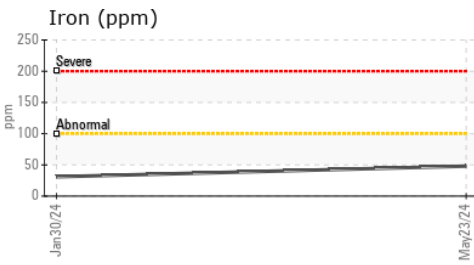
# OIL ANALYSIS REPORT



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	9.7	9.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0127016      **Received** : 30 May 2024  
**Lab Number** : 06195031      **Tested** : 31 May 2024  
**Unique Number** : 11057154      **Diagnosed** : 31 May 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #119**  
 39 INDUSTRIAL AVE  
 HASBROUCK HEIGHTS, NJ  
 US 07604  
 Contact: MIKE LONGETTE  
 mlongette@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)      F: (201)528-7053