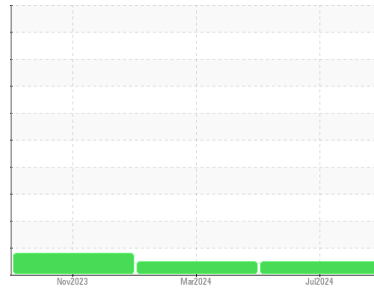


# OIL ANALYSIS REPORT

### Sample Rating Trend



**NORMAL**



Machine Id  
**742190**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## 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

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		<b>PCA0129123</b>	PCA0119002	PCA0112211
Sample Date	Client Info		<b>02 Jul 2024</b>	05 Mar 2024	15 Nov 2023
Machine Age	mls	Client Info	<b>89645</b>	65083	38586
Oil Age	mls	Client Info	<b>89645</b>	65083	38586
Oil Changed		Client Info	<b>Changed</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>83</b>	23	113
Chromium	ppm	ASTM D5185m >20	<b>6</b>	<1	12
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185m	<b>36</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>98</b>	4	135
Lead	ppm	ASTM D5185m >40	<b>0</b>	1	0
Copper	ppm	ASTM D5185m >330	<b>84</b>	3	▲ 395
Tin	ppm	ASTM D5185m >15	<b>2</b>	<1	5
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>14</b>	6	19
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 50	<b>32</b>	62	43
Manganese	ppm	ASTM D5185m 0	<b>2</b>	0	5
Magnesium	ppm	ASTM D5185m 950	<b>642</b>	948	503
Calcium	ppm	ASTM D5185m 1050	<b>1611</b>	1236	1670
Phosphorus	ppm	ASTM D5185m 995	<b>994</b>	1176	691
Zinc	ppm	ASTM D5185m 1180	<b>1239</b>	1305	889
Sulfur	ppm	ASTM D5185m 2600	<b>3383</b>	3481	2438

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	5	8
Sodium	ppm	ASTM D5185m	<b>4</b>	2	3
Potassium	ppm	ASTM D5185m >20	<b>210</b>	5	300

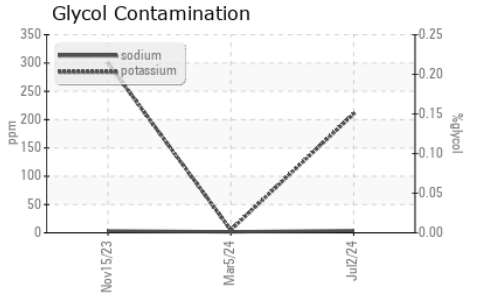
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.2</b>	1	0.9
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.2</b>	10.4	11.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>27.3</b>	20.0	23.7

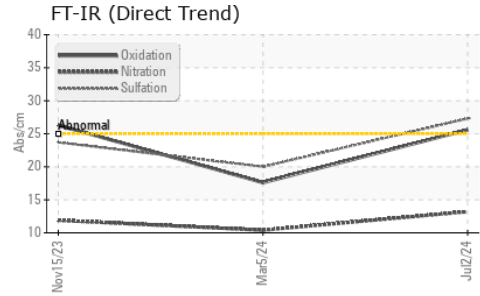
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>25.6</b>	17.6	26.3
Base Number (BN)	mg KOH/g	ASTM D2896	<b>4.4</b>	8.4	6.4

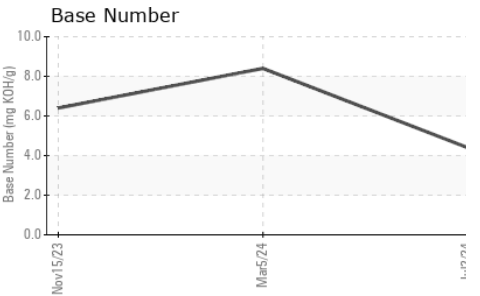
# OIL ANALYSIS REPORT



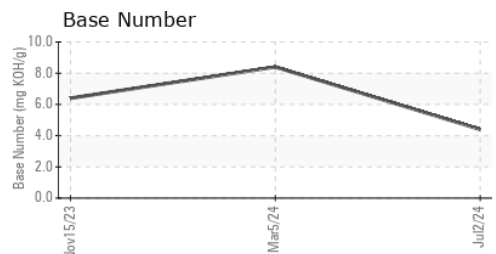
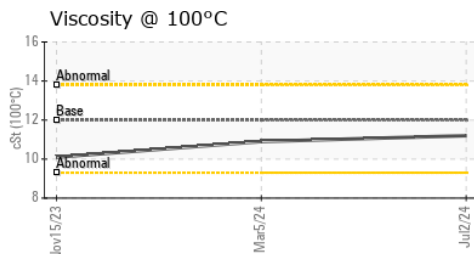
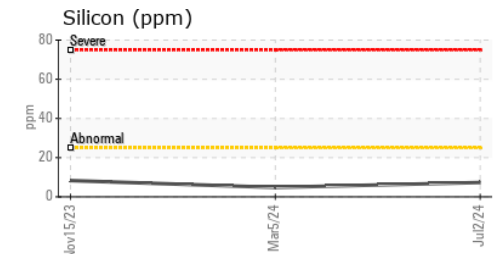
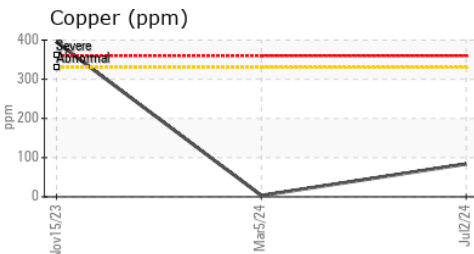
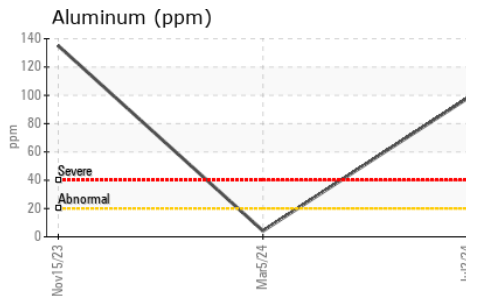
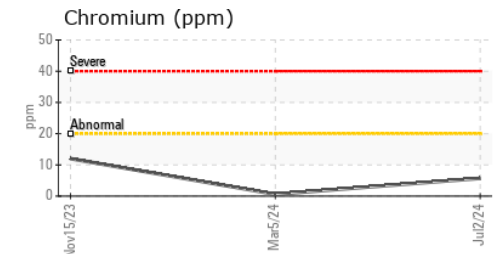
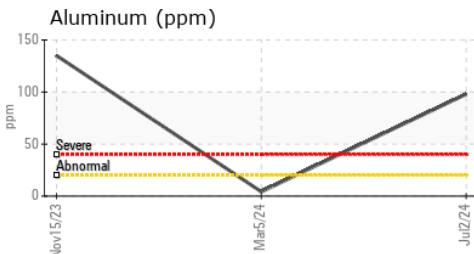
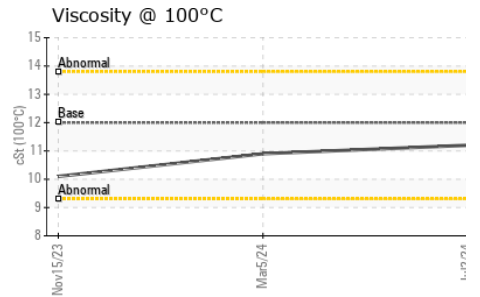
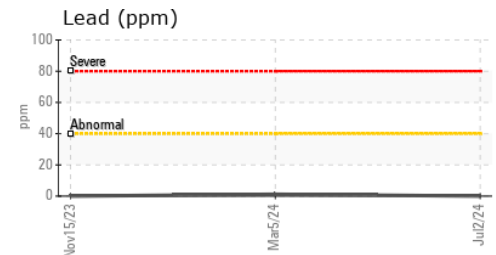
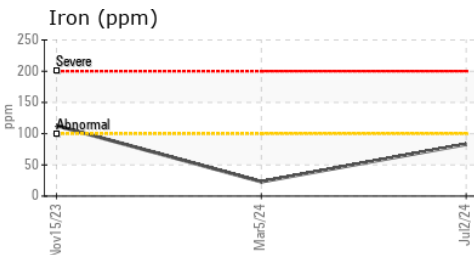
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.2	10.9



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0129123 **Received** : 12 Jul 2024  
**Lab Number** : 06234456 **Tested** : 12 Jul 2024  
**Unique Number** : 11123290 **Diagnosed** : 14 Jul 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #118**  
 2196 BENNETT ROAD  
 PHILADELPHIA, PA  
 US 19116  
 Contact: ROSTY VITER  
 rviter@millertransgroup.com  
 T: (215)552-9832  
 F: (215)552-9892

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)