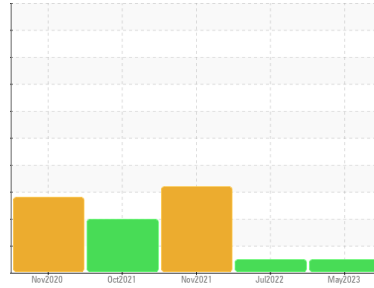


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**618532**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### 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 condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		<b>PCA0083841</b>	PCA0071749	PCA0053366
Sample Date	Client Info		<b>11 May 2023</b>	19 Jul 2022	12 Nov 2021
Machine Age	mls	Client Info	<b>206654</b>	158657	113586
Oil Age	mls	Client Info	<b>47997</b>	45071	69510
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >100	<b>37</b>	40	80
Chromium	ppm	ASTM D5185m >20	<b>2</b>	3	7
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>63</b>	5	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>15</b>	19	▲ 44
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m >330	<b>11</b>	20	79
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	2
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 2	<b>14</b>	11	6
Barium	ppm	ASTM D5185m 0	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>31</b>	56	55
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m 950	<b>599</b>	885	980
Calcium	ppm	ASTM D5185m 1050	<b>1639</b>	1159	1186
Phosphorus	ppm	ASTM D5185m 995	<b>1070</b>	904	980
Zinc	ppm	ASTM D5185m 1180	<b>1243</b>	1158	1180
Sulfur	ppm	ASTM D5185m 2600	<b>3524</b>	2504	2107

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	5	8
Sodium	ppm	ASTM D5185m	<b>0</b>	3	6
Potassium	ppm	ASTM D5185m >20	<b>21</b>	27	▲ 90

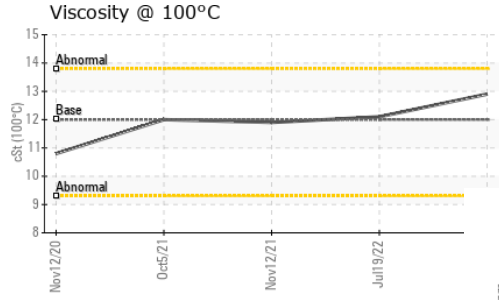
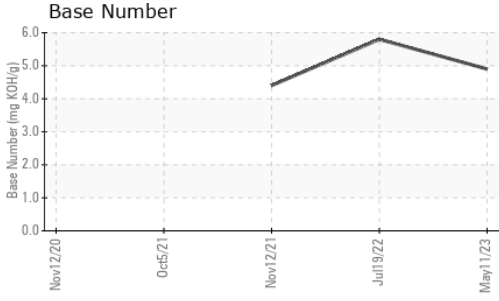
## INFRA-RED

	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >3	<b>1.4</b>	1.3	1.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.3</b>	13.9	14
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>31.0</b>	28.8	29

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>26.3</b>	24.1	▲ 25.5
Base Number (BN)	mg KOH/g	ASTM D2896	<b>4.9</b>	5.8	4.4

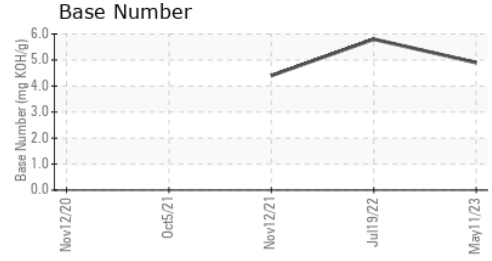
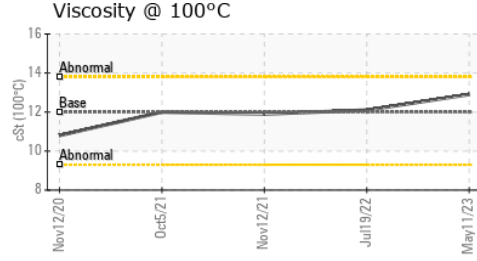
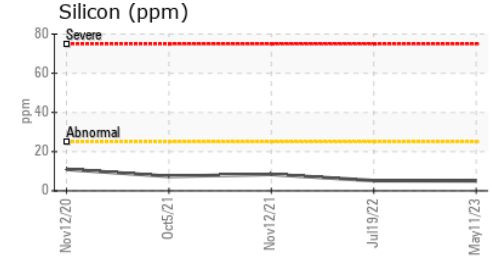
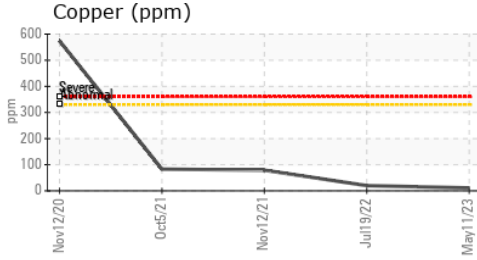
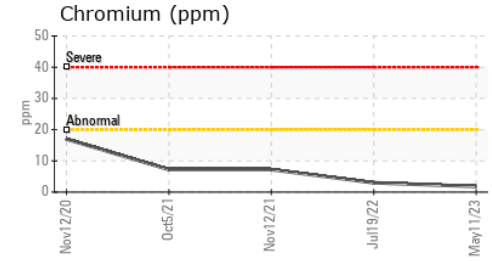
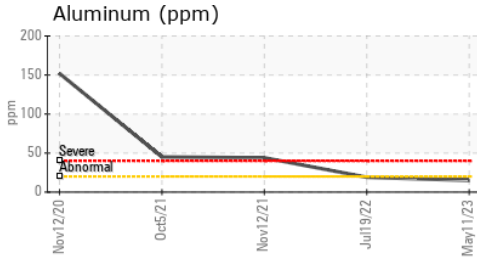
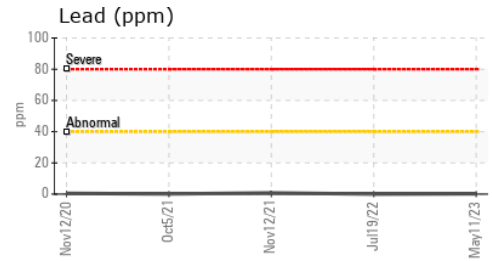
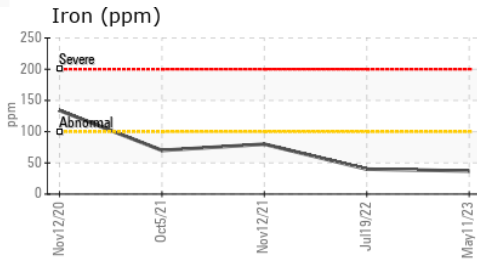
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	12.00	<b>12.9</b>	12.1	11.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0083841 **Received** : 03 Jul 2023  
**Lab Number** : 05888781 **Diagnosed** : 05 Jul 2023  
**Unique Number** : 10539264 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #123**  
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 LANCASTER, PA  
 US 17601  
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 roberts@millertransgroup.com  
 T: (717)945-6205  
 F: (717)945-5818

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)