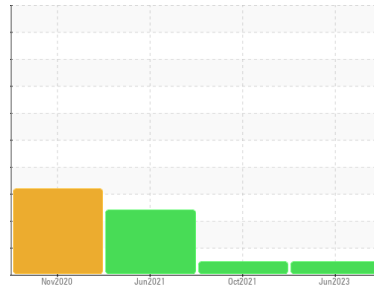


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**705590**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. 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>PCA0100742</b>	PCA0057159	PCA0053242
Sample Date	Client Info		<b>30 Jun 2023</b>	13 Oct 2021	15 Jun 2021
Machine Age	mls	Client Info	<b>6758</b>	57252	70330
Oil Age	mls	Client Info	<b>6758</b>	57252	70330
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>39</b>	49	107
Chromium	ppm	ASTM D5185m >20	<b>1</b>	3	8
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	24	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>12</b>	21	▲ 61
Lead	ppm	ASTM D5185m >40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >330	<b>6</b>	44	103
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	3
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 2	<b>26</b>	8	30
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>74</b>	39	50
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	1	3
Magnesium	ppm	ASTM D5185m 950	<b>245</b>	728	822
Calcium	ppm	ASTM D5185m 1050	<b>2135</b>	1690	1446
Phosphorus	ppm	ASTM D5185m 995	<b>1031</b>	977	965
Zinc	ppm	ASTM D5185m 1180	<b>1313</b>	1175	1249
Sulfur	ppm	ASTM D5185m 2600	<b>3955</b>	3518	1908

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	8	11
Sodium	ppm	ASTM D5185m	<b>8</b>	4	6
Potassium	ppm	ASTM D5185m >20	<b>16</b>	40	▲ 127

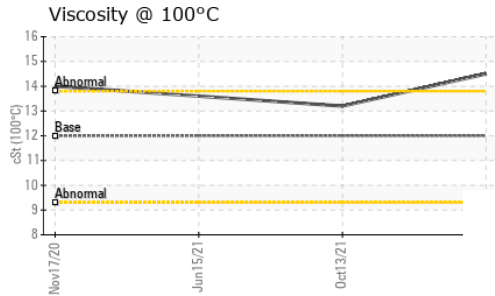
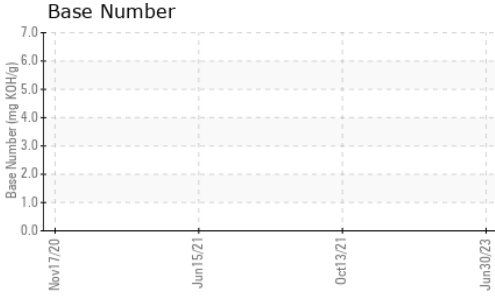
## INFRA-RED

	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >3	<b>0.9</b>	1.2	1.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.2</b>	15.1	18
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.9</b>	28.3	31.1

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.6</b>	27.9	33.6
Base Number (BN)	mg KOH/g	ASTM D2896	<b>6.3</b>	---	---

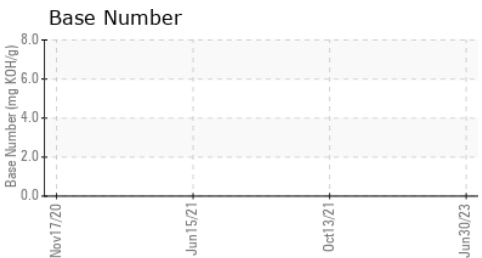
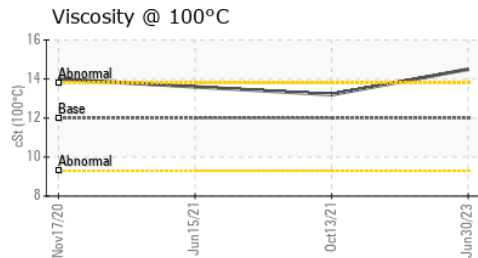
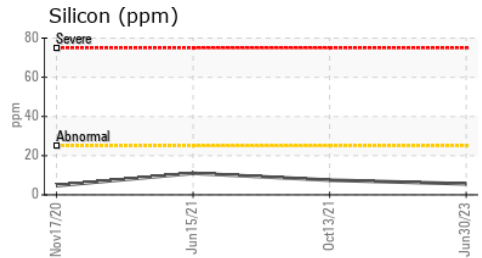
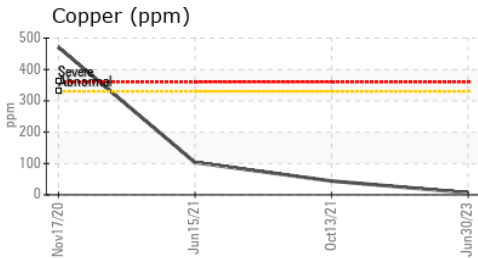
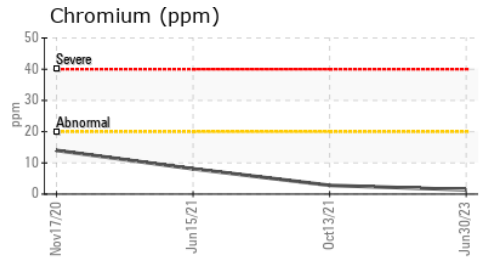
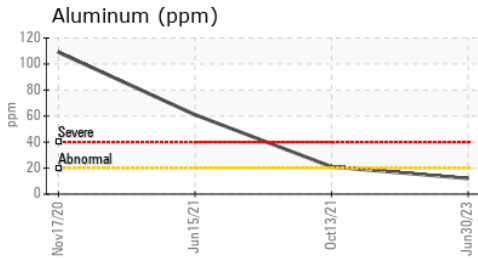
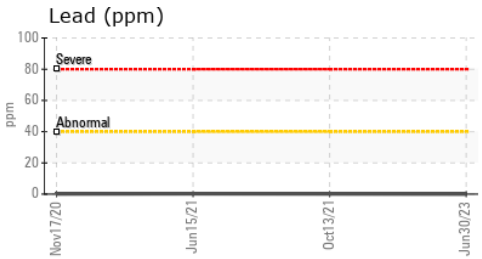
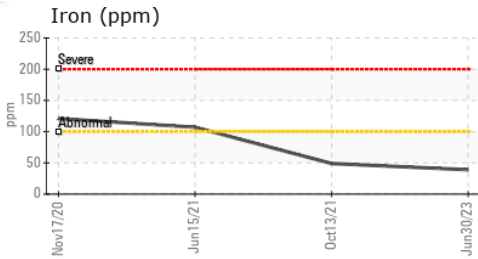
# OIL ANALYSIS REPORT



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	14.5	13.2 ▲ 13.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0100742 **Received** : 07 Jul 2023  
**Lab Number** : 05891981 **Diagnosed** : 09 Jul 2023  
**Unique Number** : 10547791 **Diagnostician** : Doug Bogart  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #118**  
 2196 BENNETT ROAD  
 PHILADELPHIA, PA  
 US 19116  
 Contact: JOHN KEEN  
 jkeen@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)