

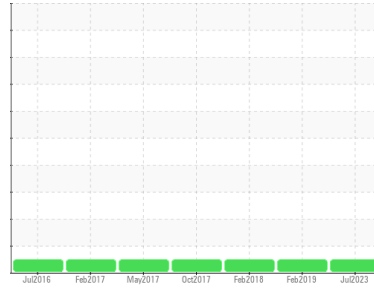
# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



Area  
**PHILADELPHIA WATER ICE FACTORY II INC**  
 Machine Id  
**HINO 320627**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (20 QTS)**



## 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	history1	history2
Sample Number	Client Info		<b>PCA0100787</b>	PCAM132600	PCAM117303
Sample Date	Client Info		<b>22 Jul 2023</b>	28 Feb 2019	28 Feb 2018
Machine Age	mls	Client Info	<b>212669</b>	185160	162733
Oil Age	mls	Client Info	<b>212669</b>	6902	8718
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>41</b>	31	15
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m >2	<b>1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>9</b>	6	5
Lead	ppm	ASTM D5185m >40	<b>6</b>	2	1
Copper	ppm	ASTM D5185m >330	<b>5</b>	<1	<1
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>34</b>	7	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>32</b>	59	54
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>793</b>	930	790
Calcium	ppm	ASTM D5185m 1050	<b>1485</b>	1141	1125
Phosphorus	ppm	ASTM D5185m 995	<b>1061</b>	971	940
Zinc	ppm	ASTM D5185m 1180	<b>1224</b>	1038	986
Sulfur	ppm	ASTM D5185m 2600	<b>4504</b>	3416	3217

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	3	3
Sodium	ppm	ASTM D5185m	<b>7</b>	4	11
Potassium	ppm	ASTM D5185m >20	<b>6</b>	2	1

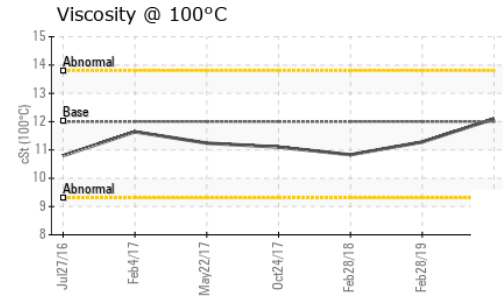
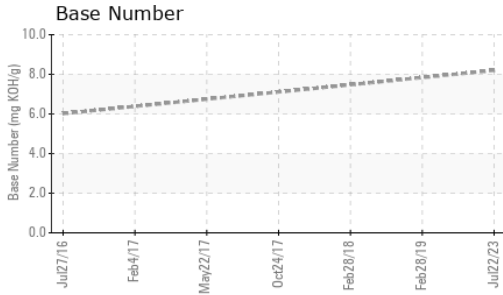
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>1.1</b>	0.8	0.7
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.1</b>	10.2	9.
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25.1</b>	19.3	19.

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.5</b>	17	15.
Base Number (BN)	mg KOH/g	ASTM D2896	<b>8.2</b>	---	---

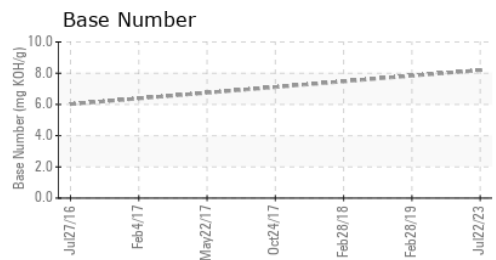
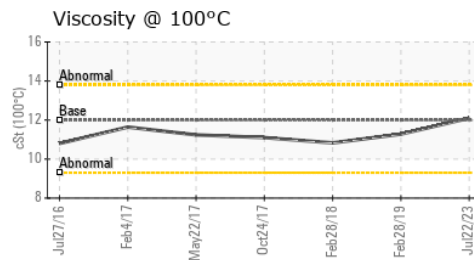
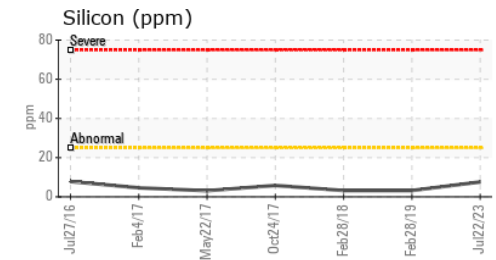
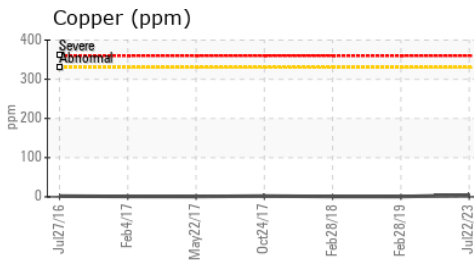
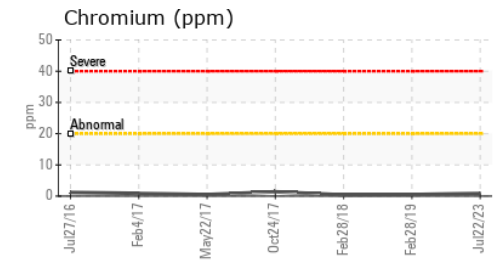
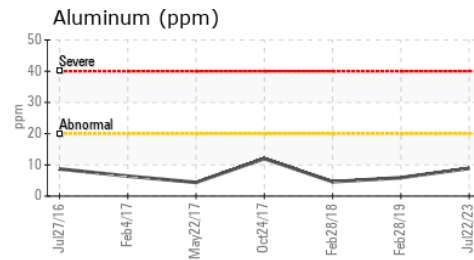
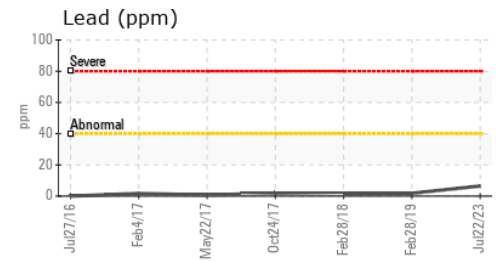
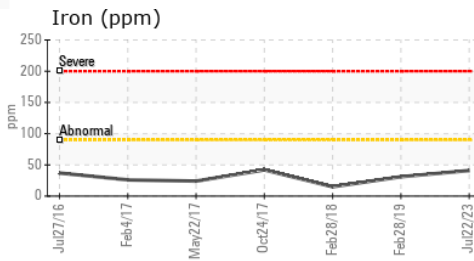
# OIL ANALYSIS REPORT



VISUAL	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	12.1	11.28

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0100787 **Received** : 21 Aug 2023  
**Lab Number** : 05929251 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 10609198 **Diagnostician** : Wes Davis  
**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)