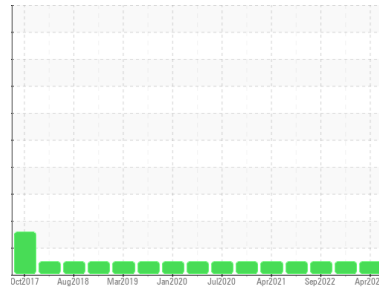


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**HINO 386987**  
 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	history1	history2
Sample Number	Client Info		<b>PCA0101969</b>	PCA0089891	PCA0078965
Sample Date	Client Info		<b>04 Apr 2024</b>	06 Feb 2023	29 Sep 2022
Machine Age	mls	Client Info	<b>210258</b>	182671	173169
Oil Age	mls	Client Info	<b>0</b>	0	9293
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	>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>14</b>	14	12
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	10	25
Lead	ppm	ASTM D5185m >40	<b>3</b>	2	1
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	3
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
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>8</b>	6	10
Barium	ppm	ASTM D5185m 0	<b>2</b>	0	<1
Molybdenum	ppm	ASTM D5185m 50	<b>63</b>	67	70
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>930</b>	940	853
Calcium	ppm	ASTM D5185m 1050	<b>1178</b>	1169	1092
Phosphorus	ppm	ASTM D5185m 995	<b>1052</b>	1068	1005
Zinc	ppm	ASTM D5185m 1180	<b>1277</b>	1257	1179
Sulfur	ppm	ASTM D5185m 2600	<b>3352</b>	3007	3316

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	3	1
Sodium	ppm	ASTM D5185m	<b>4</b>	3	3
Potassium	ppm	ASTM D5185m >20	<b>7</b>	23	68

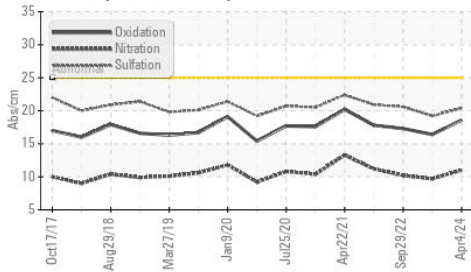
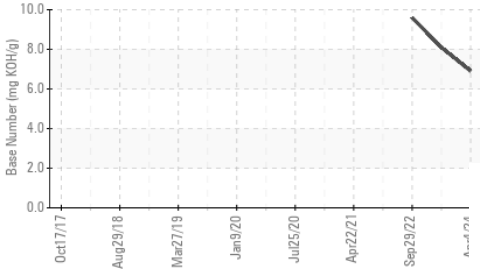
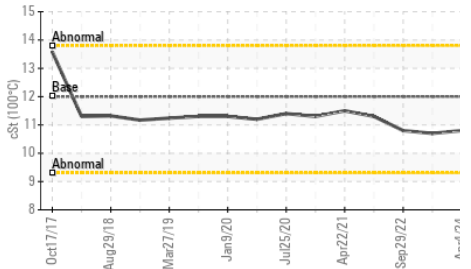
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.8</b>	0.7	0.7
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.0</b>	9.7	10.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.4</b>	19.2	20.6

### FLUID DEGRADATION

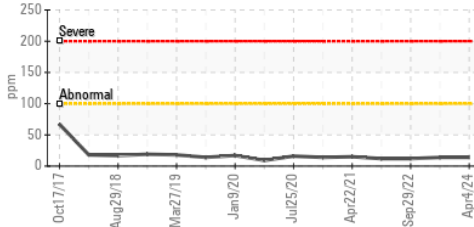
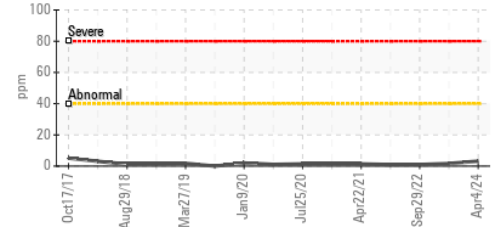
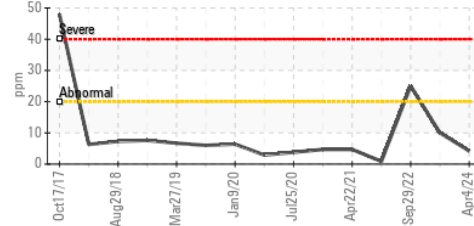
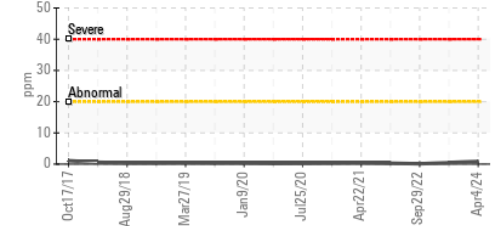
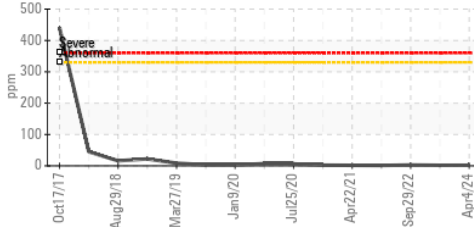
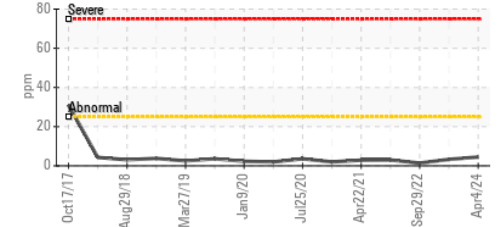
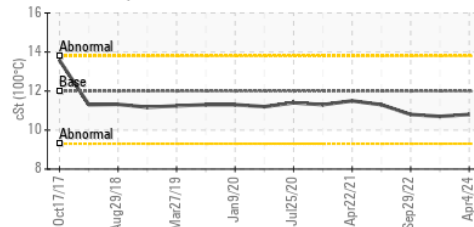
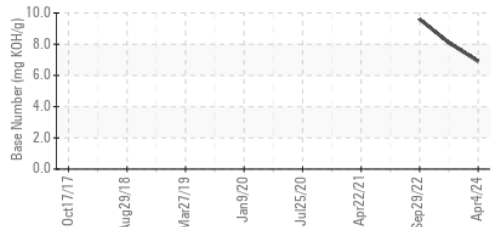
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.6</b>	16.4	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	<b>6.9</b>	8.1	9.6

# OIL ANALYSIS REPORT

**FT-IR (Direct Trend)**

**Base Number**

**Viscosity @ 100°C**


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	10.8	10.7

**GRAPHS**
**Iron (ppm)**

**Lead (ppm)**

**Aluminum (ppm)**

**Chromium (ppm)**

**Copper (ppm)**

**Silicon (ppm)**

**Viscosity @ 100°C**

**Base Number**


Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0101969 **Received** : 26 Apr 2024  
**Lab Number** : 06161245 **Tested** : 27 Apr 2024  
**Unique Number** : 10996668 **Diagnosed** : 27 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #112**  
 1504 MAINLINE DR  
 CINNAMINSON, NJ  
 US 08077

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)

 Contact: MIKE BOYER  
 mboyer@millertransgroup.com

T: (856)662-4264

F: (856)663-4898