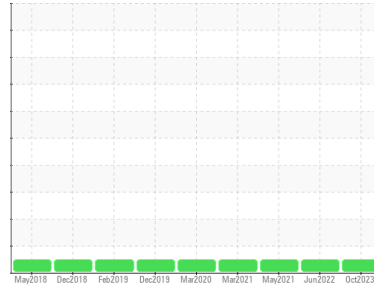


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

Area  
**MARINE EQUIPMENT & SUPPLY CO**  
 Machine Id  
**HINO 365169**  
 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>PCA0105783</b>	PCA0029205	PCA0047059
Sample Date	Client Info	<b>02 Oct 2023</b>	06 Jun 2022	21 May 2021
Machine Age	mls Client Info	<b>306309</b>	0	234445
Oil Age	mls Client Info	<b>0</b>	0	4500
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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>10</b>	35	5
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	<1
Titanium	ppm ASTM D5185m	<b>0</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >20	<b>2</b>	3	1
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	3	<1
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	1	<1
Tin	ppm ASTM D5185m >15	<b>0</b>	1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	<b>12</b>	6	36
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>69</b>	68	55
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 950	<b>883</b>	964	893
Calcium	ppm ASTM D5185m 1050	<b>1107</b>	1172	1127
Phosphorus	ppm ASTM D5185m 995	<b>1015</b>	1072	969
Zinc	ppm ASTM D5185m 1180	<b>1242</b>	1332	1179
Sulfur	ppm ASTM D5185m 2600	<b>3215</b>	3207	2910

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	4	6
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	10	2
Potassium	ppm ASTM D5185m >20	<b>2</b>	2	<1

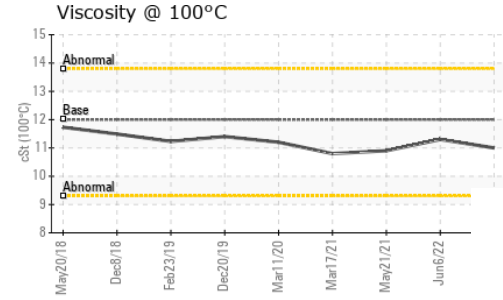
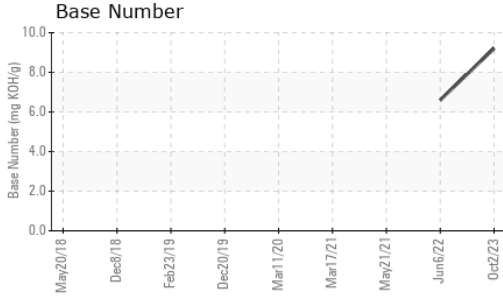
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.3</b>	1.2	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>7.4</b>	14.1	6.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.1</b>	25.0	18.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.6</b>	23.6	13.7
Base Number (BN)	mg KOH/g ASTM D2896	<b>9.2</b>	6.6	---

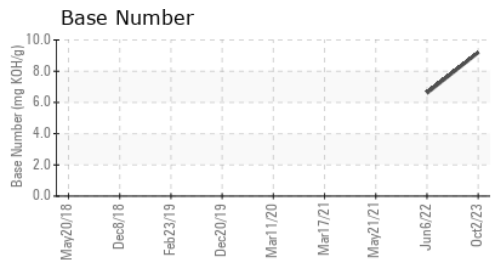
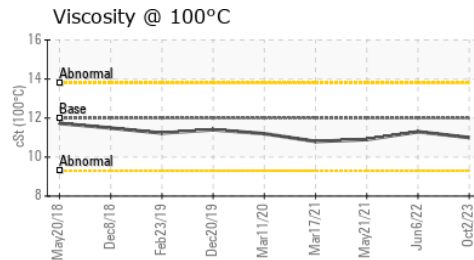
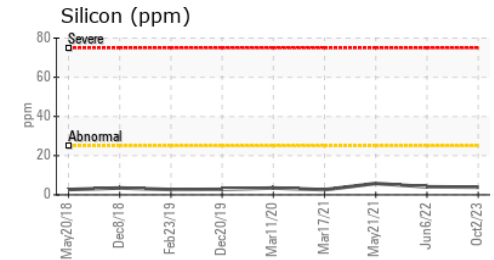
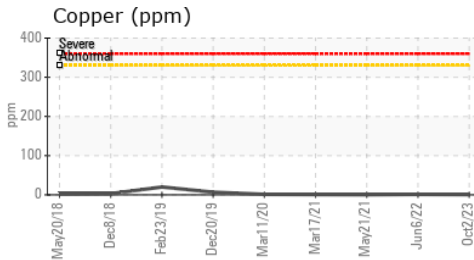
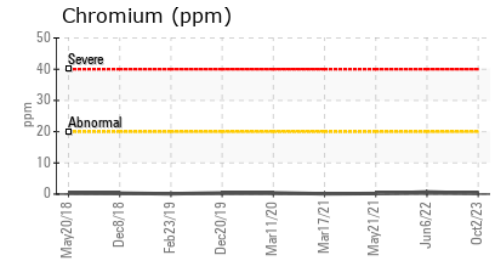
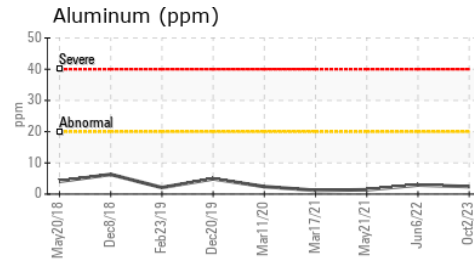
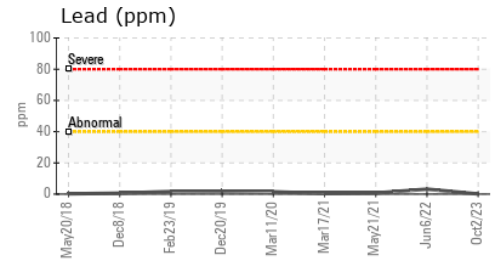
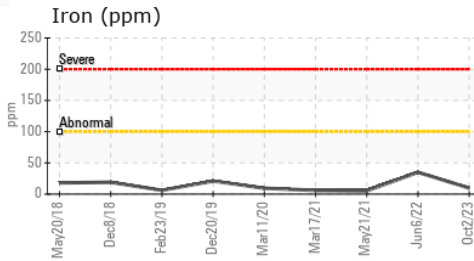
# OIL ANALYSIS REPORT



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	11.0	11.3	10.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0105783 **Received** : 08 Nov 2023  
**Lab Number** : 06001274 **Diagnosed** : 08 Nov 2023  
**Unique Number** : 10729634 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #114**  
 63 REPAUPO STATION ROAD  
 LOGAN TOWNSHIP, NJ  
 US 08085  
 Contact: ED DAVIS  
 edavis@millertransgroup.com  
 T: (856)214-3521  
 F: (856)214-3663

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)