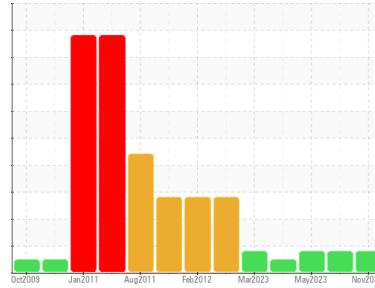


Area  
**Inactive Off Road**  
Machine Id  
**E00**

Component  
**Diesel Engine**  
Fluid

**PETRO CANADA DURON SHP 15W40 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### ▲ Wear

The aluminum level is abnormal. All other 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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0109815</b>	PCA0098474	PCA0083253
Sample Date	Client Info		<b>07 Nov 2023</b>	07 Aug 2023	24 May 2023
Machine Age	hrs	Client Info	<b>32373</b>	32373	32373
Oil Age	hrs	Client Info	<b>3026</b>	3026	3026
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## 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>25</b>	29	31
Chromium	ppm	ASTM D5185m >20	<b>2</b>	3	4
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>▲ 22</b>	▲ 29	▲ 44
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	4	0
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	6	<1
Tin	ppm	ASTM D5185m >15	<b>0</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>5</b>	11	7
Barium	ppm	ASTM D5185m 0	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>57</b>	61	60
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	2	<1
Magnesium	ppm	ASTM D5185m 1010	<b>855</b>	804	895
Calcium	ppm	ASTM D5185m 1070	<b>940</b>	1010	1199
Phosphorus	ppm	ASTM D5185m 1150	<b>985</b>	884	1042
Zinc	ppm	ASTM D5185m 1270	<b>1180</b>	1139	1292
Sulfur	ppm	ASTM D5185m 2060	<b>2772</b>	3292	3878

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>9</b>	10	5
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	6	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	2

## INFRA-RED

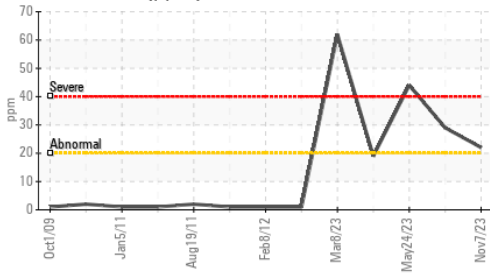
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.7</b>	0.9	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.4</b>	8.1	7.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.3</b>	20.0	19.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.6</b>	15.4	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.79</b>	10.28	10.38

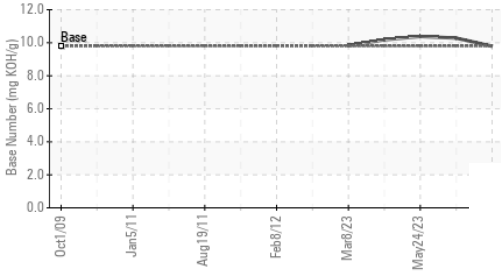
# OIL ANALYSIS REPORT

▲ Aluminum (ppm)



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

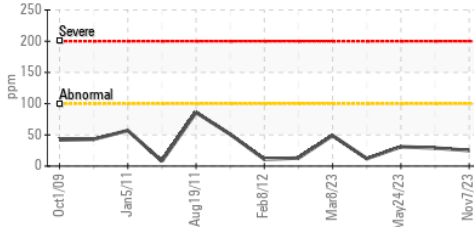
Base Number



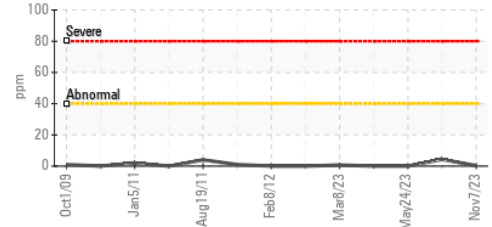
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	14.2

### GRAPHS

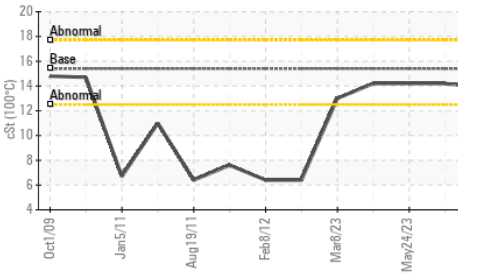
Iron (ppm)



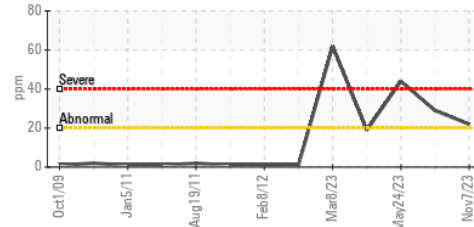
Lead (ppm)



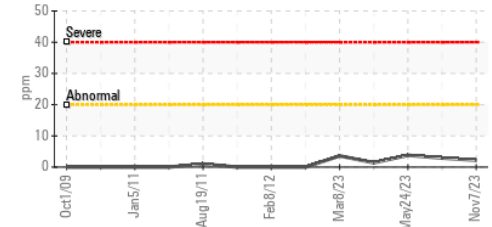
Viscosity @ 100°C



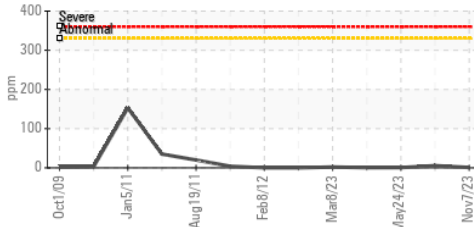
▲ Aluminum (ppm)



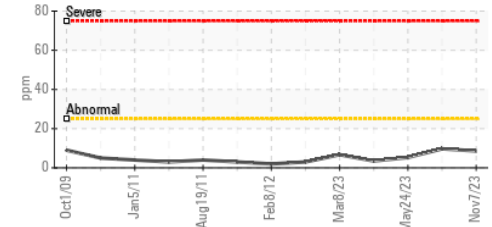
Chromium (ppm)



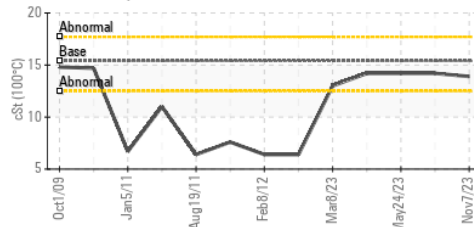
Copper (ppm)



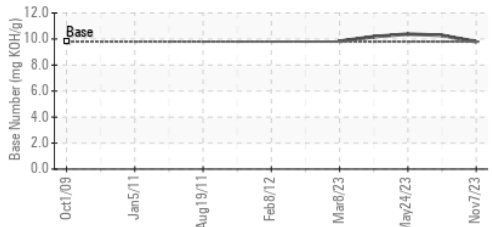
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0109815 **Received** : 09 Nov 2023  
**Lab Number** : 06003064 **Diagnosed** : 14 Nov 2023  
**Unique Number** : 10736826 **Diagnostician** : Angela Borella  
**Test Package** : MOB 2

**G LOPES CONSTRUCTION**  
 565 WINTHROP ST  
 TAUNTON, MA  
 US 02780  
 Contact: BUTCH MCGRATH  
 bmcgrath@glopes.com

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)

T:  
F: