

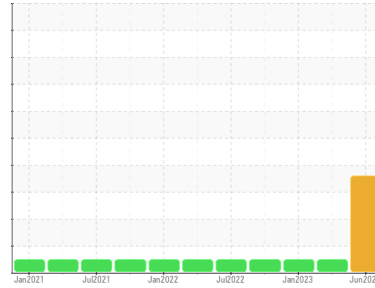
# PROBLEM SUMMARY

Sample Rating Trend

GLYCOL

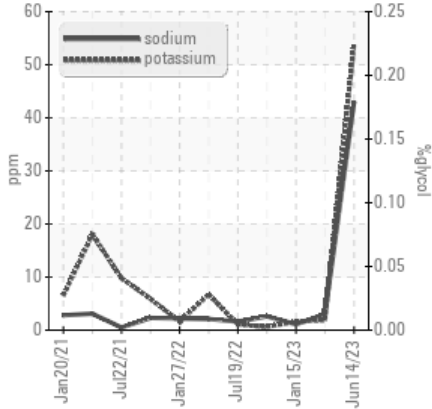


Machine Id  
**2026835**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

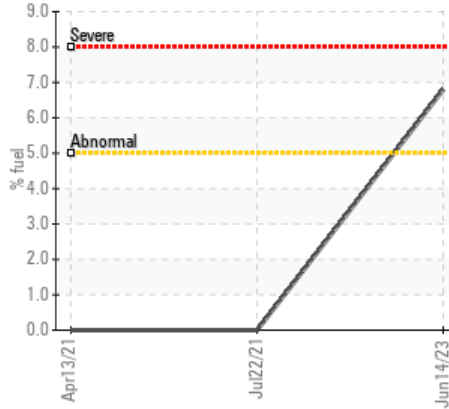


## COMPONENT CONDITION SUMMARY

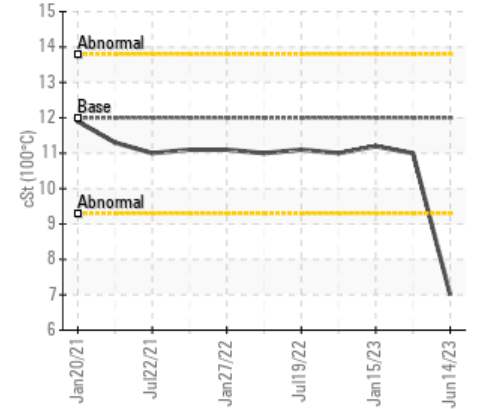
### ▲ Glycol Contamination



### ▲ Fuel Dilution



### ▲ Viscosity @ 100°C



## RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status		ABNORMAL	NORMAL	NORMAL
Potassium	ppm   ASTM D5185m   >20	▲ 54	2	2
Fuel	%   ASTM D3524   >5	▲ 6.8	<1.0	<1.0
Base Number (BN)	mg KOH/g   ASTM D2896	▲ 0.0	6.3	8.1
Visc @ 100°C	cSt   ASTM D445   12.00	▲ 7	11.0	11.2

Customer Id: PERGEODE  
Sample No.: PCA0100369  
Lab Number: 05930755  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

## HISTORICAL DIAGNOSIS

### 04 Apr 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Please specify the component make and model with your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 15 Jan 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 30 Oct 2022 Diag: Wes Davis

NORMAL



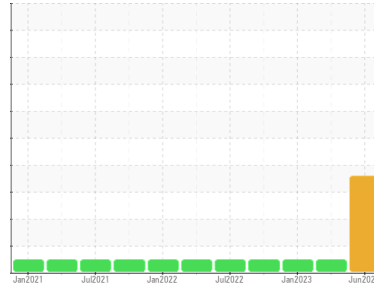
Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report





Machine Id  
**2026835**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**



**DIAGNOSIS**

**Recommendation**  
 We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 Sodium and/or potassium levels are high. There is a moderate amount of fuel present in the oil. Test for glycol is negative.

**Fluid Condition**  
 Fuel is present in the oil and is lowering the viscosity. The BN level is low.

**SAMPLE INFORMATION**

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0100369</b>	PCA0094887	PCA0090089
Sample Date	Client Info	<b>14 Jun 2023</b>	04 Apr 2023	15 Jan 2023
Machine Age	mls	<b>305457</b>	285945	263099
Oil Age	mls	<b>29512</b>	44785	21939
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Not Chngd
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

**WEAR METALS**

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >100	<b>29</b>	32	16
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>2</b>	6	6
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>8</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>2</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>14</b>	8	5
Tin	ppm	ASTM D5185m >15	<b>1</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 2	<b>81</b>	3	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>15</b>	56	47
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>180</b>	886	780
Calcium	ppm	ASTM D5185m 1050	<b>371</b>	1209	1110
Phosphorus	ppm	ASTM D5185m 995	<b>504</b>	940	906
Zinc	ppm	ASTM D5185m 1180	<b>313</b>	1237	1112
Sulfur	ppm	ASTM D5185m 2600	<b>2393</b>	3663	3552

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>12</b>	4	3
Sodium	ppm	ASTM D5185m	<b>43</b>	3	1
Potassium	ppm	ASTM D5185m >20	<b>▲ 54</b>	2	2
Fuel	%	ASTM D3524 >5	<b>▲ 6.8</b>	<1.0	<1.0
Glycol	%	*ASTM D2982	<b>NEG</b>	NEG	NEG

**INFRA-RED**

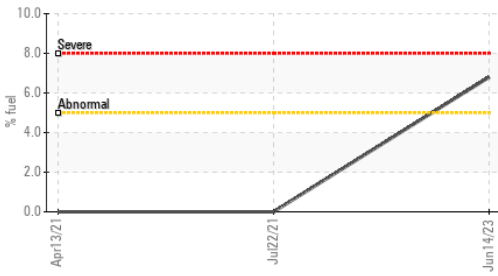
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.8</b>	10.8	9.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>53.3</b>	21.3	19.0

**FLUID DEGRADATION**

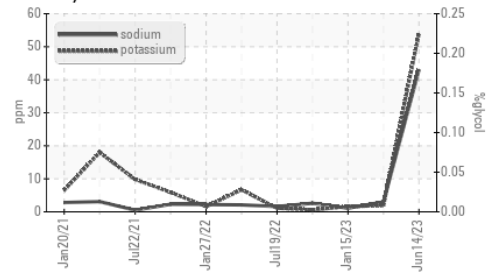
method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>64.2</b>	16.7	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	<b>▲ 0.0</b>	6.3	8.1

# OIL ANALYSIS REPORT

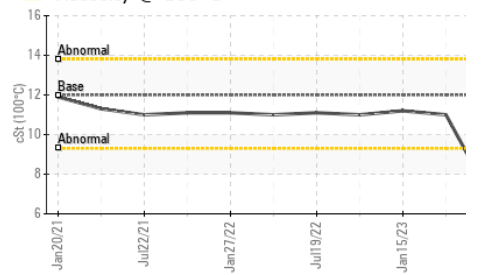
### ▲ Fuel Dilution



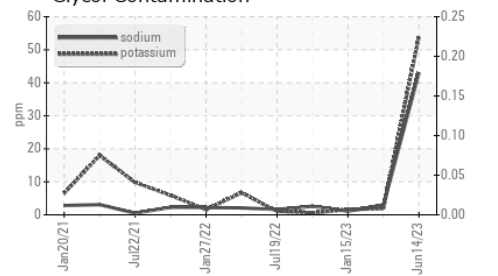
### ● Glycol Contamination



### ▲ Viscosity @ 100°C



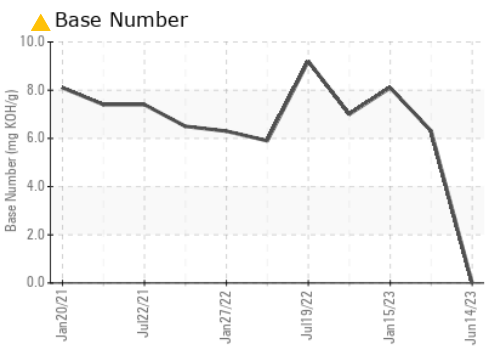
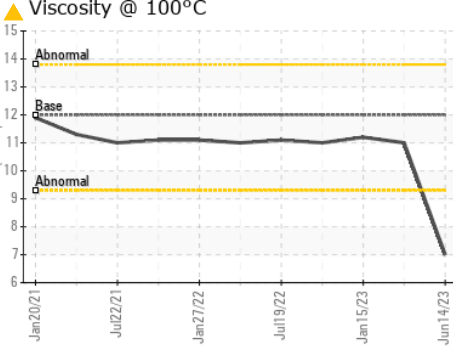
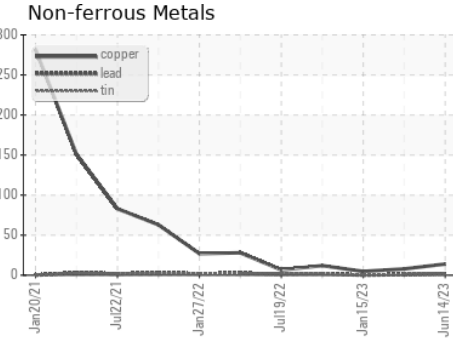
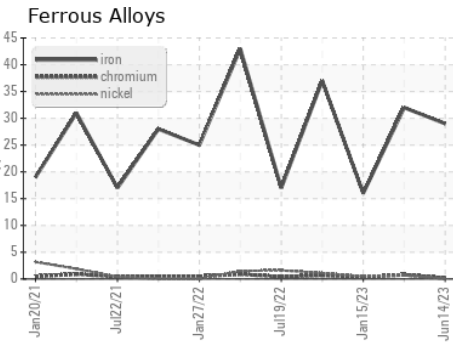
### ● Glycol Contamination



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 ▲ 7	11.0	11.2

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0100369 **Received** : 22 Aug 2023  
**Lab Number** : 05930755 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 10616026 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution, Glycol, PercentFuel )

**PERDUE FARMS - GEORGETOWN**  
 20621 SAVANAH RD  
 GEORGETOWN, DE  
 US 19947  
 Contact: ROBERT LOCKWOOD  
 Robert.Lockwood@Perdue.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)

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F: