

## **OIL ANALYSIS REPORT**

Sample Rating Trend

#### NORMAL

### NOT GIVEN PCA0101163 (S/N NO INFO ON SIF/BOTTLE) Component

**Diesel Engine** Fluid

PETRO CANADA DURON UHP 5W30 (--- GA

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

#### Wear

Metal levels are typical for a new component breaking in.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

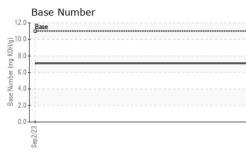
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

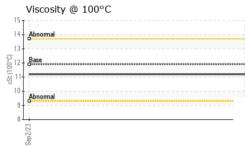
L)				Sep2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101163		
Sample Date		Client Info		02 Sep 2023		
Machine Age	mls	Client Info		61000		
Oil Age	mls	Client Info		20000		
Oil Changed	11115	Client Info		Not Changd		
-				NORMAL		
Sample Status				-		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	17		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		2		
Silver	ppm	ASTM D5185m	>3	- <1		
Aluminum	ppm	ASTM D5185m	>20	13		
Lead	ppm	ASTM D5185m		3		
Copper	ppm	ASTM D5185m		129		
Fin	ppm		>15	2		
/anadium	ppm	ASTM D5185m	210	0		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES	1-1-	method	limit/base	current	history1	history2
			0			
Boron	ppm	ASTM D5185m	÷	1		
Barium	ppm	ASTM D5185m	0	44		
Molybdenum	ppm	ASTM D5185m	64	55		
Manganese	ppm	ASTM D5185m	0	2		
Magnesium		A OTH DELOF	4.4.0.0			
-	ppm	ASTM D5185m	1160	852		
Calcium	ppm	ASTM D5185m	820	1008		
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	820 1160	1008 898		
Calcium Phosphorus Zinc	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	820 1160 1260	1008 898 1117		
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m	820 1160	1008 898		
Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	820 1160 1260	1008 898 1117		
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	820 1160 1260 3000	1008 898 1117 2839		  
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	820 1160 1260 3000 limit/base	1008 898 1117 2839 current		   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ITS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	820 1160 1260 3000 limit/base >25	1008 898 1117 2839 current 7	   history1	   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ITS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	820 1160 1260 3000 limit/base >25	1008 898 1117 2839 current 7 2	   history1 	   history2 
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ITS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	820 1160 1260 3000 limit/base >25 >20	1008 898 1117 2839 current 7 2 34	   history1  	   history2  
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm iTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	820 1160 1260 3000 limit/base >25 >20 limit/base	1008 898 1117 2839 current 7 2 34 current	   history1   history1	   history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm iTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	820 1160 1260 3000 limit/base >25 >20 limit/base >3	1008 898 1117 2839 current 7 2 34 current 0.4	   history1   history1 	   history2  history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm iTTS ppm ppm ppm ppm ppm ppm abs/cm Abs/cm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	820 1160 1260 3000 limit/base >25 >20 limit/base >3 >20	1008 898 1117 2839 current 7 2 34 current 0.4 8.1	   history1   history1 	   history2   history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm iTTS ppm ppm ppm ppm ppm ppm abs/cm Abs/cm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	820 1160 1260 3000 limit/base >25 >20 limit/base >3 >20 >30	1008 898 1117 2839 current 7 2 34 current 0.4 8.1 19.3	   history1   history1  	   history2   history2  history2

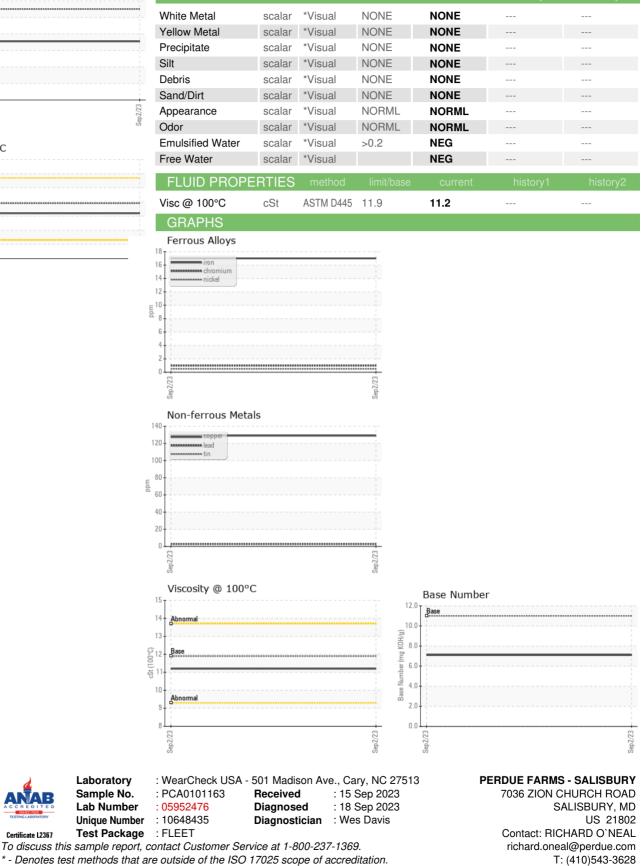


# **OIL ANALYSIS REPORT**

VISUAL







Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

Contact/Location: RICHARD O`NEAL - PERSALMD

F: (410)341-2164