

## **OIL ANALYSIS REPORT**

### (33693Z) Walgreens [Walgreens] 136A62599 Componen

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (1\*

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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.

AL)						
		mothod	Mar2023	Aug2023	history1	history
	MATION		limit/base	current	history1	history2
Sample Number		Client Info		PCA0093788	PCA0093824 27 Mar 2023	
Sample Date Machine Age	mls	Client Info Client Info		09 Aug 2023 173886	155018	
Oil Age	mls	Client Info		50000	25018	
Oil Changed	11115	Client Info		Changed	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method	20	NEG	NEG	
-	0		11 11 11			
WEAR METAL		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	32	15	
Chromium	ppm	ASTM D5185m	>5	6	3	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>30	35	23	
Lead	ppm	ASTM D5185m	>30	0	0	
Copper	ppm	ASTM D5185m	>150	17	10	
Tin	ppm	ASTM D5185m	>5	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	2	
Barium	ppm	ASTM D5185m	0	2	0	
Molybdenum	ppm	ASTM D5185m	50	83	60	
Manganese	ppm		0	1	1	
Magnesium	ppm	ASTM D5185m	950	1198	966	
Calcium	ppm	ASTM D5185m		1489	1204	
Phosphorus	ppm	ASTM D5185m	995	1269	1036	
Zinc	ppm	ASTM D5185m	1180	1609	1289	
Sulfur	ppm	ASTM D5185m	2600	3621	3378	
CONTAMINAN		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	11	6	
Sodium	ppm	ASTM D5185m	00	2	2	
Potassium	ppm	ASTM D5185m	>20	79	47	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.7	0.4	
Nitration	Abs/cm	*ASTM D7624	>20	9.2	7.9	
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	19.7	
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	15.6	
Base Number (BN)	mg KOH/g	ASTM D2896		6.1	8.2	



Sample Rating Trend



NORMAL



cSt (100°C) Ba

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Abnorm

Mar27/23

# **OIL ANALYSIS REPORT**

scalar

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\*Visual

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NONE

VISUAL

White Metal

Yellow Metal

Precipitate

Silt



