

## **OIL ANALYSIS REPORT**

(51450Z) Walgreens [Walgreens] 136A63375 Componen

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (40 QTS

### DIAGNOSIS

#### Recommendation

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.

SIS REPC	N	NORMAL				
QTS)				Aug2023		
SAMPLE INFOR	MATION		limit/base		history1	history2
Sample Number		Client Info		PCA0099933		
Sample Date		Client Info		27 Aug 2023		
Machine Age	hrs	Client Info		80994		
Oil Age	hrs	Client Info		50000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
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	>80	48		
Chromium	ppm	ASTM D5185m	>5	4		
Nickel	ppm	ASTM D5185m	>2	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>30	28		
Lead	ppm	ASTM D5185m	>30	0		
Copper	ppm	ASTM D5185m	>150	39		
Tin	ppm	ASTM D5185m	>5	2		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	63		
Manganese	ppm	ASTM D5185m	0	2		
Magnesium	ppm	ASTM D5185m	950	994		
Calcium	ppm	ASTM D5185m	1050	1278		
Phosphorus	ppm	ASTM D5185m	995	973		
Zinc	ppm	ASTM D5185m	1180	1281		
Sulfur	ppm	ASTM D5185m	2600	2663		
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	6		
Sodium	ppm	ASTM D5185m		3		
Potassium	ppm	ASTM D5185m	>20	64		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.9		
Nitration	Abs/cm	*ASTM D7624	>20	9.6		
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7		

Sample Rating Trend

NORMAL

Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9		
Base Number (BN)	mg KOH/g	ASTM D2896		6.3		



cSt (100°C) Ba

Abnorm

Aug27/23

# **OIL ANALYSIS REPORT**

scalar

scalar

scalar

scalar

\*Visual

\*Visual

\*Visual

\*Visual

scalar \*Visual

NONE

VISUAL

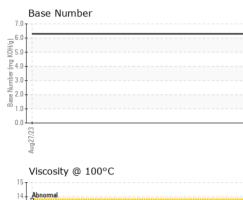
White Metal

Yellow Metal

Precipitate

Silt

Debris





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

Contact/Location: Paul Santanella - TSV1374