

## **OIL ANALYSIS REPORT**

Sample Number

mls

mls

WC Method

Sample Date

Machine Age

Oil Changed

Sample Status

CONTAMINATION

Oil Age

Fuel

Water

Glycol

### (60901Z) Walgreens - Tractor [Walgreens - Tractor] 136A63294 omponen

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (11 GAL)

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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.



NEG

- ,						
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	56		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	31		
Lead	ppm	ASTM D5185m	>40	6		
Copper	ppm	ASTM D5185m	>330	23		
Tin	ppm	ASTM D5185m	>15	5		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	27		
Barium	ppm	ASTM D5185m	0	4		
Molybdenum	ppm	ASTM D5185m	50	57		
Manganese	ppm	ASTM D5185m	0	4		
Magnesium	ppm	ASTM D5185m	950	427		
Calcium	ppm	ASTM D5185m	1050	1643		
Phosphorus	ppm	ASTM D5185m	995	987		
Zinc	ppm	ASTM D5185m	1180	1178		
Sulfur	ppm	ASTM D5185m	2600	2633		
CONTAMINANTS		method	limit/base	current	history1	history2

Silicon	ppm	ASTM D5185m	>25	39	 
Sodium	ppm	ASTM D5185m		6	 
Potassium	ppm	ASTM D5185m	>20	82	 

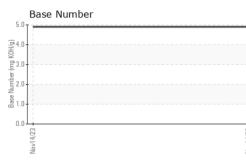
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6		
Nitration	Abs/cm	*ASTM D7624	>20	10.1		
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.4		
Base Number (BN)	mg KOH/g	ASTM D2896		4.9		

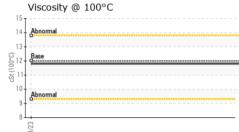


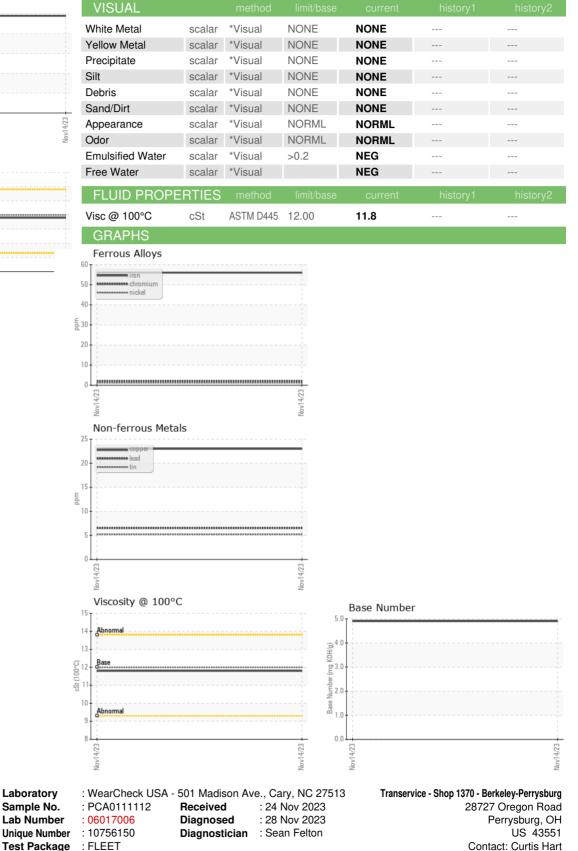


Nov1

# **OIL ANALYSIS REPORT**









\* - 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)

Laboratory

Sample No.

Submitted By: Curtis Hart Page 2 of 2

chart@transervice.com T: (419)666-3277

F: (419)666-3279