

# Area (72556Z) Walgreens - Tractor [Walgreens - Tractor] 136A624022

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

## DIAGNOSIS

#### A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### A Wear

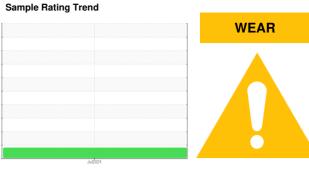
The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in.

#### Contamination

Elevated aluminum (AI) 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.



SAMPLE INFORM	<b>NATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128165		
Sample Date		Client Info		03 Jul 2024		
Machine Age	mls	Client Info		62074		
Oil Age	mls	Client Info		62074		
Oil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	103		
Chromium	ppm	ASTM D5185m	>5	7		
Nickel	ppm	ASTM D5185m	>2	4		
Titanium	ppm	ASTM D5185m	<i>7L</i>	4 <1		
Silver		ASTM D5185m	>3	<1 <1		
Aluminum	ppm	ASTM D5185m	>3	208		
Lead	ppm		>30	208		
	ppm	ASTM D5185m		J 336		
Copper	ppm	ASTM D5185m				
Tin Vanadium	ppm	ASTM D5185m	>5	17		
	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	24		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	46		
Manganese	ppm	ASTM D5185m	0	9		
Magnesium	ppm	ACTM DE10Em	950			
	PPIII	ASTM D5185m	950	562		
Calcium	ppm	ASTM D5185m ASTM D5185m	1050	562 1697		
Calcium Phosphorus Zinc	ppm	ASTM D5185m ASTM D5185m	1050	1697		
Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	1050 995	1697 772		
Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180	1697 772 909		
Phosphorus Zinc Sulfur CONTAMINAN <sup>*</sup>	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base	1697 772 909 2096		  
Phosphorus Zinc Sulfur	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600 limit/base	1697 772 909 2096 current		  
Phosphorus Zinc Sulfur CONTAMINAN <sup>-</sup> Silicon	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base	1697 772 909 2096 current 12	   history1	   history2
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium	ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >20	1697 772 909 2096 current 12 14	   history1 	   history2 
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >20	1697 772 909 2096 current 12 14 489	  history1  	  history2  
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982	1050 995 1180 2600 limit/base >20 >20	1697 772 909 2096 current 12 14 489 NEG	  history1  	  history2   
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium Glycol	ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982 method	1050 995 1180 2600 limit/base >20 >20 limit/base >3	1697 772 909 2096 current 12 14 489 NEG current	  history1    history1	  history2    history2
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m *ASTM D2982 <b>method</b> *ASTM D7844 *ASTM D7844	1050 995 1180 2600 limit/base >20 >20 limit/base >3	1697 772 909 2096 current 12 14 489 NEG current 0.8	  history1    history1 history1	  history2    history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982 *ASTM D2982 *ASTM D7844 *ASTM D7844	1050 995 1180 2600 limit/base >20 >20 limit/base >3 >20	1697 772 909 2096 current 12 14 489 NEG current 0.8 11.2	  history1    history1  history1	  history2    history2
Phosphorus Zinc Sulfur CONTAMINAN <sup>T</sup> Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D2982 *ASTM D2982 *ASTM D7844 *ASTM D7844	1050 995 1180 2600 limit/base >20 >20 	1697 772 909 2096 current 12 14 489 NEG current 0.8 11.2 24.2	  history1    history1	  history2    history2  history2

OIL DIAGNOSTICS

# **OIL ANALYSIS REPORT**

