

(72607Z) Walgreens - Tractor [Walgreens - Tractor] 136A624305

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

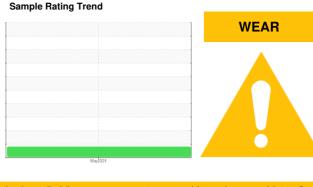
The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.

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

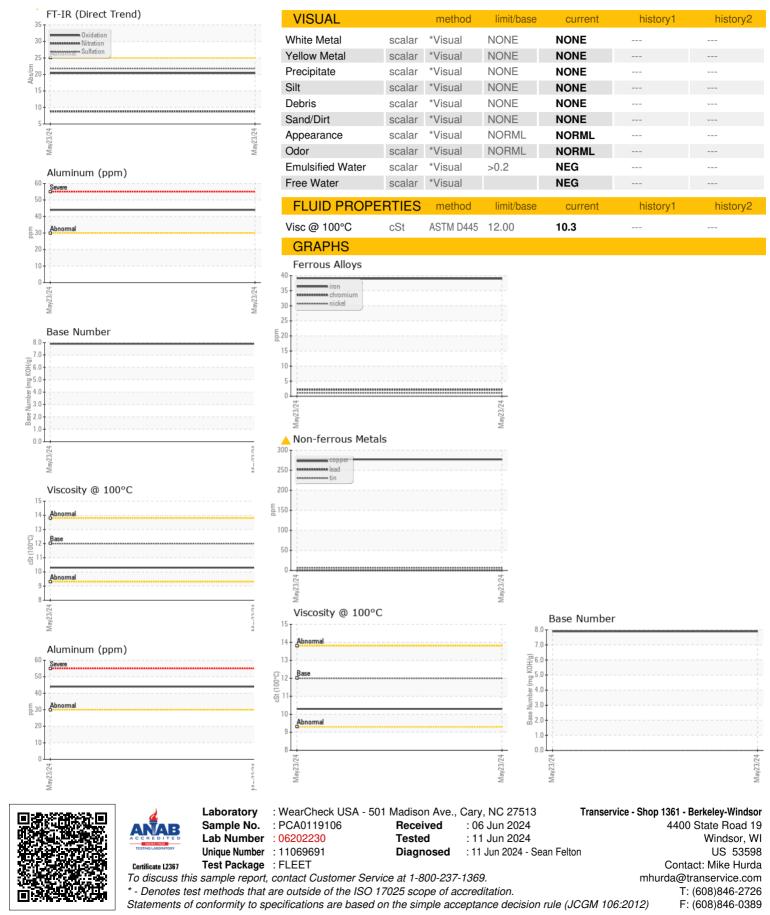
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.



SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0119106		
Sample Date		Client Info		23 May 2024		
Machine Age	hrs	Client Info		20356		
Oil Age	hrs	Client Info		20356		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATIO	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	39		
	ppm	ASTM D5185m	>5	2		
	ppm	ASTM D5185m	>2	1		
	ppm	ASTM D5185m		<1		
	ppm	ASTM D5185m	>3	<1		
	ppm	ASTM D5185m	>30	44		
	ppm	ASTM D5185m	>30	<1		
	ppm	ASTM D5185m	>150	<u> </u>		
Tin	ppm	ASTM D5185m	>5	6		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
_	ppm	method ASTM D5185m	limit/base	current 71	history1	history2
Boron	ppm ppm					
Boron Barium		ASTM D5185m	2	71		
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	2 0	71 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	71 0 69		
Boron Barium I Molybdenum I Manganese I Magnesium I	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	71 0 69 4		
Boron Barium Molybdenum Manganese Magnesium Calcium I	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	71 0 69 4 561		
Boron Barium Molybdenum Manganese Galcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	71 0 69 4 561 1608	 	
Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc School Calcium Phosphorus Calcium C	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	71 0 69 4 561 1608 875	 	
Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc School Calcium Phosphorus Calcium C	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	71 0 69 4 561 1608 875 920		
Boron Barium Barium Molybdenum Manganese Magnesium Galcium Phosphorus Zinc Sulfur CONTAMINANT	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	71 0 69 4 561 1608 875 920 2621		
Boron Barium Angenese Angenesium Angenese Angenesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Angenesium Angene	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	71 0 69 4 561 1608 875 920 2621 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm S	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	71 0 69 4 561 1608 875 920 2621 2621 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm S S ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	71 0 69 4 561 1608 875 920 2621 2621 current 7 2	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm S S ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	71 0 69 4 561 1608 875 920 2621 current 7 2 2 141	 history1 	 history2
Boron Barium Angenesium Angenesium Angenesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm S ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	71 0 69 4 561 1608 875 920 2621 current 7 2 141 current	 history1 history1	 history2 history2
Boron A A A A A A A A A A A A A A A A A A A	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >20 20 imit/base >3	71 0 69 4 561 1608 875 920 2621 current 7 2 141 current 0.3	 history1 history1	 history2 history2
Boron Barium Angenesium Angenesium Angenesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Angenesi Angene	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >20 >20 imit/base >3 >3	71 0 69 4 561 1608 875 920 2621 current 7 2 141 current 0.3 8.8	 history1 history1 	 history2 history2
Boron Barium Angenesium Angenesium Angenesium Calcium Phosphorus Internet CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >3	71 0 69 4 561 1608 875 920 2621 current 7 2 141 current 0.3 8.8 21.8	 history1 history1 history1	 history2 history2 history2
Boron A A A A A A A A A A A A A A A A A A A	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 2600 20 20 20 20 20 3 3 20 20 3 3 20 3 3 3 20 3 3 20 3 3 3 20 3 3 3 20 3 3 3 20 3 3 3 20 3 3 3 20 3 3 3 3	71 0 69 4 561 1608 875 920 2621 2621 2621 7 2 2 141 0.3 8.8 21.8 current	 history1 history1 history1	 history2 history2 history2 history2

OIL DIAGNOSTICS

OIL ANALYSIS REPORT



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