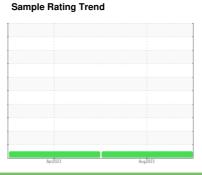


OIL ANALYSIS REPORT

(AY411B) Supermarket FREIGHTLINER 107A8808

Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (11 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

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.

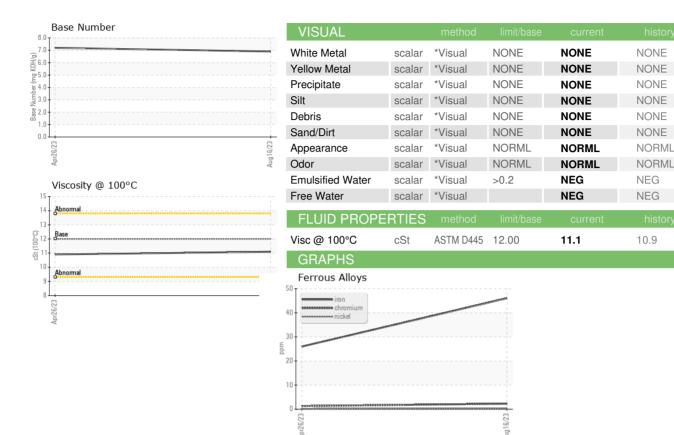
Fluid Condition

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

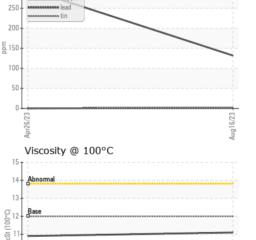
GAL)			Apr2023	Aug2023		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0104122	PCA0097054	
Sample Date		Client Info		16 Aug 2023	26 Apr 2023	
Machine Age	mls	Client Info		36998	24400	
Oil Age	mls	Client Info		12598	10514	
Oil Changed		Client Info		Changed	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		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	46	26	
Chromium	ppm	ASTM D5185m	>5	2	1	
Nickel	ppm	ASTM D5185m	>2	<1	<1	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>30	26	13	
Lead	ppm	ASTM D5185m	>30	2	0	
Copper	ppm	ASTM D5185m	>150	132	298	
Tin	ppm	ASTM D5185m	>5	2	1	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
	1-1-	Alo Till Do Toolii		U	U	
ADDITIVES	1-1-	method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		limit/base			history2
		method		current	history1	history2
Boron	ppm	method ASTM D5185m	2	current	history1 23	
Boron Barium	ppm	method ASTM D5185m ASTM D5185m	2	current 13	history1 23 0	
Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 13 0 64	history1 23 0 59	
Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 13 0 64 2	history1 23 0 59 2	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 13 0 64 2 915	history1 23 0 59 2 835	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 13 0 64 2 915 1400	history1 23 0 59 2 835 1244	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995	current 13 0 64 2 915 1400 933	history1 23 0 59 2 835 1244 933	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180	current 13 0 64 2 915 1400 933 1218	history1 23 0 59 2 835 1244 933 1159	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 13 0 64 2 915 1400 933 1218 2712	history1 23 0 59 2 835 1244 933 1159 3121	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 13 0 64 2 915 1400 933 1218 2712 current	history1 23 0 59 2 835 1244 933 1159 3121 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 13 0 64 2 915 1400 933 1218 2712 current 8	history1 23 0 59 2 835 1244 933 1159 3121 history1 5	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	current 13 0 64 2 915 1400 933 1218 2712 current 8 5	history1 23 0 59 2 835 1244 933 1159 3121 history1 5	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	current 13 0 64 2 915 1400 933 1218 2712 current 8 5 76	history1 23 0 59 2 835 1244 933 1159 3121 history1 5 5 39	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	current 13 0 64 2 915 1400 933 1218 2712 current 8 5 76 current	history1 23 0 59 2 835 1244 933 1159 3121 history1 5 39 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20	current 13 0 64 2 915 1400 933 1218 2712 current 8 5 76 current 0.8	history1 23 0 59 2 835 1244 933 1159 3121 history1 5 5 39 history1 0.4	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	method ASTM D5185m method ASTM D5185m ASTM D5185m *ASTM D5185m ASTM D76185m ASTM D76185m ASTM D76185m ASTM D76185m ASTM D76185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base	current 13 0 64 2 915 1400 933 1218 2712 current 8 5 76 current 0.8 9.8	history1 23 0 59 2 835 1244 933 1159 3121 history1 5 5 39 history1 0.4 7.3	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm	method ASTM D5185m method ASTM D5185m ASTM D5185m *ASTM D5185m ASTM D76185m ASTM D76185m ASTM D76185m ASTM D76185m ASTM D76185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base >3 >20 >3	current 13 0 64 2 915 1400 933 1218 2712 current 8 5 76 current 0.8 9.8 22.4	history1 23 0 59 2 835 1244 933 1159 3121 history1 5 5 39 history1 0.4 7.3 18.6	history2 history2

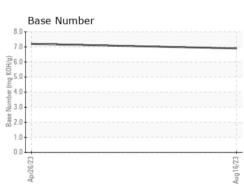


OIL ANALYSIS REPORT



Non-ferrous Metals









Certificate L2367

Laboratory Sample No. Lab Number Unique Number

: PCA0104122 : 05940485

: 10631097 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 01 Sep 2023 Received

Aug16/23

Diagnosed : 01 Sep 2023 : Wes Davis Diagnostician

Transervice - Shop 1071 - Supermarket-Dayton 60 A Tower Road

Dayton, NJ US 08810 Contact: Brian Quinn

bquinn@transervice.com

T: F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)