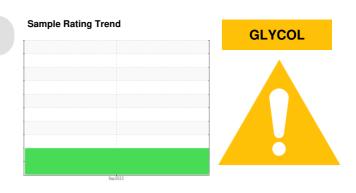


PROBLEM SUMMARY

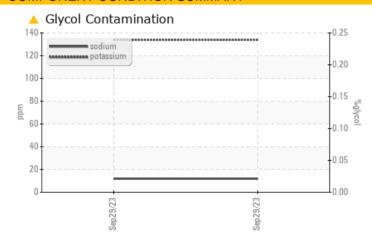
(59083Z) Walgreens - Tractor [Walgreens - Tractor] 136A624321

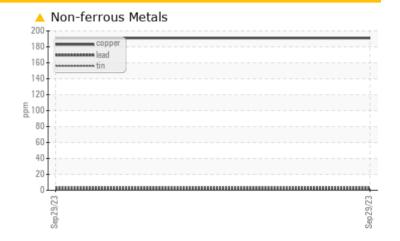
Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)



COMPONENT CONDITION SUMMARY





RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATI	C TES	T RESULT	S		
Sample Status				ABNORMAL	
Copper	ppm	ASTM D5185m	>150	191	
Potassium	ppm	ASTM D5185m	>20	134	

Customer Id: TSV1365 Sample No.: PCA0103700 Lab Number: 05980312 Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMEND	ED ACTIONS			
Action	Status	Date	Done By	Description
Change Fluid			?	Oil and filter change at the time of sampling has been noted.
Change Filter			?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

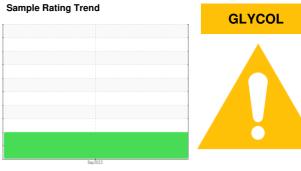


OIL ANALYSIS REPORT

(59083Z) Walgreens - Tractor [Walgreens - Tractor] 136A624321

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

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

Sodium and/or potassium levels are high. Test for glycol is negative.

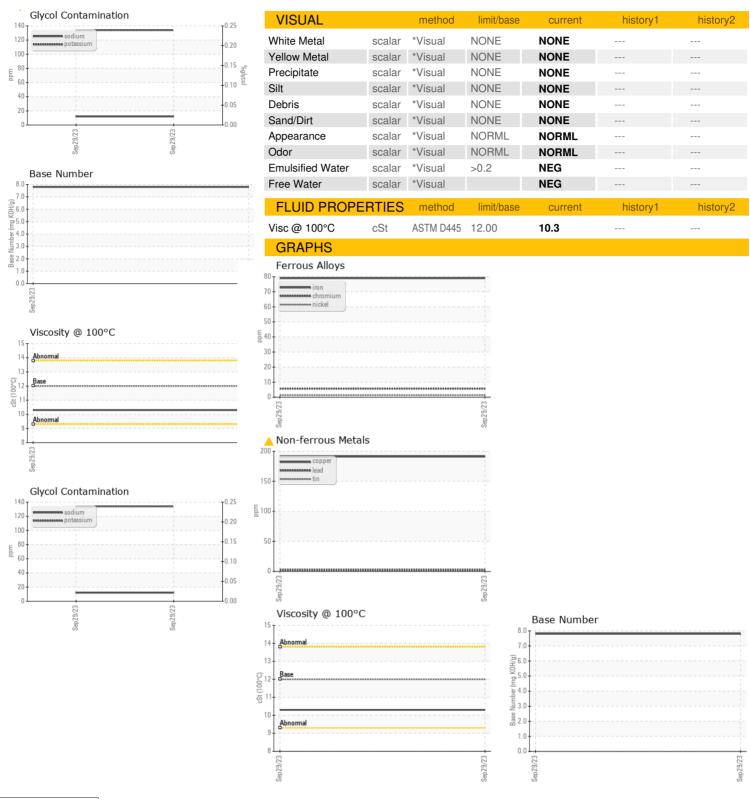
Fluid Condition

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.

AL)				Sep2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103700		
Sample Date		Client Info		29 Sep 2023		
Machine Age	mls	Client Info		36964		
Oil Age	mls	Client Info		36964		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>80	79		
Chromium	ppm	ASTM D5185m	>5	6		
Nickel	ppm	ASTM D5185m	>2	1		
Titanium	ppm	ASTM D5185m		1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>30	45		
Lead	ppm	ASTM D5185m	>30	1		
Copper	ppm	ASTM D5185m	>150	<u> </u>		
Tin	ppm	ASTM D5185m	>5	4		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base	current 25	history1	history2
Boron	ppm ppm				, i	history2
Boron Barium		ASTM D5185m	2	25		
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2	25 4		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	25 4 44		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	25 4 44 6		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	25 4 44 6 540		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	25 4 44 6 540 1586		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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	25 4 44 6 540 1586 656		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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	25 4 44 6 540 1586 656 824		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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 0 950 1050 995 1180 2600 limit/base	25 4 44 6 540 1586 656 824 1845		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	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 0 950 1050 995 1180 2600 limit/base	25 4 44 6 540 1586 656 824 1845		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	25 4 44 6 540 1586 656 824 1845 current		 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	25 4 44 6 540 1586 656 824 1845 current 8		 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	25 4 44 6 540 1586 656 824 1845 current 8 12 134		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED	ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	25 4 44 6 540 1586 656 824 1845 current 8 12 134 NEG		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D2982 method	2 0 50 0 950 1050 995 1180 2600 limit/base >20	25 4 44 6 540 1586 656 824 1845		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m *ASTM D7844	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20	25 4 44 6 540 1586 656 824 1845	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base >3 >20	25 4 44 6 540 1586 656 824 1845		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 	25 4 44 6 540 1586 656 824 1845		history2 history2



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0103700

: 05980312 : 10697607

Received : 16 Oct 2023 : 18 Oct 2023 Diagnosed : Jonathan Hester Diagnostician

Test Package : FLEET (Additional Tests: Glycol) 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)

Transervice - Shop 1365 - Berkeley-Nazareth

6813 Chrisphalt Drive Bath Borough, PA US 18014

Contact: Stephen Mackes smackes@transervice.com T: (610)837-8103

F: (610)837-8105