

# **OIL ANALYSIS REPORT**

Sample Rating Trend

# (AU398U) Supermarket - Tractor Machine Id FREIGHTLINER 107A8832

Component Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (11 GAL)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

#### Wear

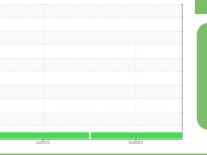
All component wear rates are normal.

#### Contamination

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.



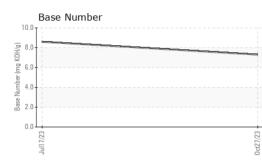


NORMAL

SAMPLE INFORM	VIATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0104077	PCA0099844	
Sample Date		Client Info		27 Oct 2023	17 Jul 2023	
Machine Age	mls	Client Info		205108	0	
Oil Age	mls	Client Info		10169	10708	
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	19	11	
Chromium	ppm		>5	<1	<1	
Nickel	ppm	ASTM D5185m	>2	<1	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	<1	0	
Aluminum	ppm	ASTM D5185m	>30	4	4	
Lead	ppm	ASTM D5185m	>30	0	0	
Copper	ppm	ASTM D5185m	>150	6	3	
Tin	ppm	ASTM D5185m	>5	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 2	current 4	history1 9	history2
	ppm ppm					
Boron		ASTM D5185m	2	4	9	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	4 4	9 2	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	4 4 69	9 2 71	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	4 4 69 <1	9 2 71 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	4 4 69 <1 895	9 2 71 <1 1050	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	4 4 69 <1 895 1088	9 2 71 <1 1050 1217	  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	4 4 69 <1 895 1088 966	9 2 71 <1 1050 1217 1127	   
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	2 0 50 950 1050 995 1180	4 4 69 <1 895 1088 966 1194	9 2 71 <1 1050 1217 1127 1369	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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 50 950 1050 995 1180 2600	4 4 69 <1 895 1088 966 1194 2958	9 2 71 <1 1050 1217 1127 1369 3946	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm 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 50 950 1050 995 1180 2600	4 4 69 <1 895 1088 966 1194 2958 current	9 2 71 <1 1050 1217 1127 1369 3946 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	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 <b>limit/base</b> >20	4 4 69 <1 895 1088 966 1194 2958 current 5	9 2 71 <1 1050 1217 1127 1369 3946 history1 4	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	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 <b>limit/base</b> >20	4 4 69 <1 895 1088 966 1194 2958 current 5 0	9 2 71 <1 1050 1217 1127 1369 3946 history1 4 1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>limit/base</b> >20	4 4 69 <1 895 1088 966 1194 2958 current 5 0 4	9 2 71 <1 1050 1217 1127 1369 3946 history1 4 1 <1	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>Imit/base</b> >20 >20	4 4 69 <1 895 1088 966 1194 2958 current 5 0 4 current	9 2 71 <1 1050 1217 1127 1369 3946 history1 4 1 <1 <1 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 TS ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base >20	4 4 69 <1 895 1088 966 1194 2958 <u>current</u> 5 0 4 <u>current</u>	9 2 71 <1 1050 1217 1127 1369 3946 history1 4 1 <1 <1 history1 0.5	     history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >20 <i>imit/base</i> >20	4 4 69 <1 895 1088 966 1194 2958 current 5 0 4 current 0.8 8.2	9 2 71 <1 1050 1217 1127 1369 3946 history1 4 1 <1 <1 history1 0.5 6.9	     history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >20 <b>imit/base</b> >3 >20 >30	4 4 69 <1 895 1088 966 1194 2958 <u>current</u> 5 0 4 <u>current</u> 0.8 8.2 20.1	9 2 71 <1 1050 1217 1127 1369 3946 history1 4 1 <1 <1 0.5 6.9 18.7	     history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624	2 0 0 50 0 950 1050 995 1180 2600 2600 20 20 20 20 20 3 20 20 20 3 3 20 20 3 3 20 20 3 3 20 20 20 20 20 20 20 20 20 20 20 20 20	4 4 69 <1 895 1088 966 1194 2958 Current 5 0 4 Current 0.8 8.2 20.1 Current	9 2 71 <1050 1217 1127 1369 3946 history1 4 1 <1 <1 history1 0.5 6.9 18.7 history1	     history2  history2  history2

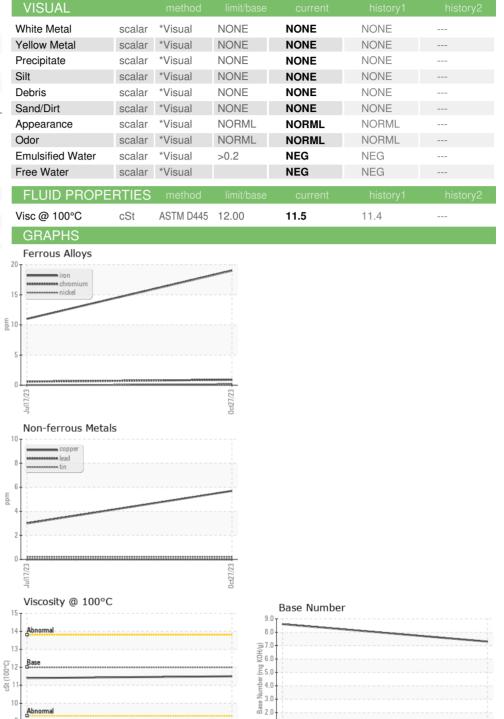


# **OIL ANALYSIS REPORT**









1.0 0.0

Jul17/23

0ct27/23

: 03 Nov 2023

: 06 Nov 2023 : Wes Davis



Test Package : FLEET Certificate L2367 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)

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

Diagnostician

Received

Diagnosed

Abnorma

: PCA0104077

: 05997613

: 10725973

Laboratory

Sample No.

Lab Number

Unique Number

T: F: Submitted By: Brian Quinn

60 A Tower Road

Contact: Brian Quinn

bquinn@transervice.com

Dayton, NJ

US 08810

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