

OIL ANALYSIS REPORT

(14252Z) Walgreens - Tractor [Walgreens - Tractor] 136A61441 Component

Diesel Engine

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.



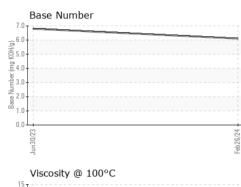
Sample Rating Trend

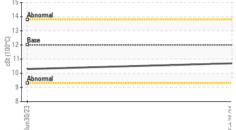


SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0116431	PCA0101023	
Sample Date		Client Info		26 Feb 2024	30 Jun 2023	
Machine Age	mls	Client Info		143963	114634	
Oil Age	mls	Client Info		29329	23523	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	47	26	
Chromium	ppm	ASTM D5185m	>20	3	3	
Nickel	ppm	ASTM D5185m	>4	۲ ۲	0	
Titanium	ppm	ASTM D5185m	77	0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	7	10	
Lead	ppm	ASTM D5185m	>40	2	<1	
Copper	ppm	ASTM D5185m	>330	2	2	
Tin	ppm	ASTM D5185m	>15	- <1	<1	
Vanadium	ppm	ASTM D5185m	210	0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	nnm	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	14	5	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	14 2	5 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	14 2 64	5 0 57	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	14 2 64 0	5 0 57 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	14 2 64 0 875	5 0 57 1 939	
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	14 2 64 0 875 1037	5 0 57 1 939 1029	
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	14 2 64 0 875 1037 986	5 0 57 1 939 1029 1023	
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	14 2 64 0 875 1037	5 0 57 1 939 1029	
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	14 2 64 0 875 1037 986 1179	5 0 57 1 939 1029 1023 1265	
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	14 2 64 0 875 1037 986 1179 2641	5 0 57 1 939 1029 1023 1265 3589	
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	14 2 64 0 875 1037 986 1179 2641 current	5 0 57 1 939 1029 1023 1265 3589 history1	 history2
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 limit/base	14 2 64 0 875 1037 986 1179 2641 current 5	5 0 57 1 939 1029 1023 1265 3589 history1 7	 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 ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base	14 2 64 0 875 1037 986 1179 2641 <u>current</u> 5 < <1	5 0 57 1 939 1029 1023 1265 3589 history1 7 2	 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 -20 limit/base	14 2 64 0 875 1037 986 1179 2641 <i>current</i> 5 <1 15 <i>current</i>	5 0 57 1 939 1029 1023 1265 3589 history1 7 2 2 21 history1	 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	14 2 64 0 875 1037 986 1179 2641 <i>current</i> 5 < 115 <i>current</i> 0.7	5 0 57 1 939 1029 1023 1265 3589 history1 7 2 2 21 history1 0.4	 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 i mit/base >25 >20 i mit/base >3 >20	14 2 64 0 875 1037 986 1179 2641 <i>current</i> 5 <1 15 <i>current</i> 0.7 10.4	5 0 57 1 939 1029 1023 1265 3589 history1 7 2 2 21 <i>history1</i> 0.4 9.7	 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	14 2 64 0 875 1037 986 1179 2641 <i>current</i> 5 < 115 <i>current</i> 0.7	5 0 57 1 939 1029 1023 1265 3589 history1 7 2 21 7 2 21 history1 0.4 9.7 20.2	 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 ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	2 0 0 50 0 950 1050 995 1180 2600 2600 255 20 220 20 20 33 20 30 20 30 20 30	14 2 64 0 875 1037 986 1179 2641 Current 5 <1 15 Current 0.7 10.4 23.1 Current	5 0 57 1 939 1029 1023 1265 3589 history1 7 2 2 21 history1 0.4 9.7 20.2 history1	 history2 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 D5185m	2 0 50 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	14 2 64 0 875 1037 986 1179 2641 <u>current</u> 5 <1 15 <u>current</u> 0.7 10.4 23.1	5 0 57 1 939 1029 1023 1265 3589 history1 7 2 21 7 2 21 history1 0.4 9.7 20.2	 history2 history2 history2



OIL ANALYSIS REPORT





		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPER	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.7	10.3	
Ferrous Alloys						
20						
10 0 5200cmn			Feb26/24			

Feb26/24.

Feb26/24.

: 05 Mar 2024

: 06 Mar 2024

7.0

6. (B/HO)

Ē 4.0 - e 3.0

ଛ 2.0 1.0 0.0 Base Number



Unique Number : 10912623 Diagnosed : 06 Mar 2024 - Wes Davis Test Package : FLEET Contact: Sonny Boucher Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. sboucher@transervice.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (864)226-2304 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (864)226-2329

Received

Tested

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

Viscosity @ 100°C

14

13

10

: PCA0116431

cSt (100°C)

Laboratory Sample No.

Lab Number : 06109126

101 Alliance Parkway

Willamston, SC

US 29697

Transervice - Shop 1373 - Berkeley-Anderson/Pendergrass

Feb26/24