

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area (89623X) Walgreens - Tractor [Walgreens] 136A68011 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

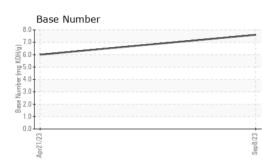
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

			Apr2023	Sep2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0093526	PCA0096550	
Sample Date		Client Info		08 Sep 2023	21 Apr 2023	
Machine Age	mls	Client Info		205797	194890	
Oil Age	mls	Client Info		10907	194890	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	48	22	
Chromium	ppm	ASTM D5185m	>5	2	<1	
Nickel	ppm	ASTM D5185m	>2	<1	0	
Titanium	ppm	ASTM D5185m		10	8	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>30	6	<1	
Lead	ppm	ASTM D5185m	>30	<1	0	
Copper	ppm	ASTM D5185m	>150	2	1	
Tin	ppm	ASTM D5185m	>5	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 19	history1 9	history2
	ppm ppm					· · · · ·
Boron		ASTM D5185m	2	19	9	
Boron Barium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0	19 0	9 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	19 0 72	9 0 46	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	19 0 72 <1	9 0 46 <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	19 0 72 <1 1091	9 0 46 <1 736	
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	19 0 72 <1 1091 1903	9 0 46 <1 736 1384	
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 9 950 1050 995	19 0 72 <1 1091 1903 1412	9 0 46 <1 736 1384 904	
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	19 0 72 <1 1091 1903 1412 1738	9 0 46 <1 736 1384 904 1180	
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	19 0 72 <1 1091 1903 1412 1738 5028	9 0 46 <1 736 1384 904 1180 3398	
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	19 0 72 <1 1091 1903 1412 1738 5028 current	9 0 46 <1 736 1384 904 1180 3398 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 0 50 950 1050 995 1180 2600 Limit/base >20	19 0 72 <1 1091 1903 1412 1738 5028 current 8	9 0 46 <1 736 1384 904 1180 3398 history1 8	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	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 Limit/base >20	19 0 72 <1 1091 1903 1412 1738 5028 <u>current</u> 8 5	9 0 46 <1 736 1384 904 1180 3398 history1 8 2	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	19 0 72 <1 1091 1903 1412 1738 5028 current 8 5 6	9 0 46 <1 736 1384 904 1180 3398 history1 8 2 3	 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base	19 0 72 <1 1091 1903 1412 1738 5028 current 8 5 6 current	9 0 46 <1 736 1384 904 1180 3398 history1 8 2 3 3 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3	19 0 72 <1 1091 1903 1412 1738 5028 <i>current</i> 8 5 6 <i>current</i> 0.5	9 0 46 <1 736 1384 904 1180 3398 history1 8 2 3 3 history1 0.7	 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 ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <i>limit/base</i> >20 <i>limit/base</i> >3 >20	19 0 72 <1 1091 1903 1412 1738 5028 <i>current</i> 8 5 6 <i>current</i> 0.5 8.8	9 0 46 <1 736 1384 904 1180 3398 history1 8 2 3 history1 0.7 11.3	 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 >20 imit/base >3 >20 >3	19 0 72 <1 1091 1903 1412 1738 5028 current 8 5 5 6 current 0.5 8.8 18.6	9 0 46 <1 736 1384 904 1180 3398 history1 8 2 3 3 history1 0.7 11.3 22.6	 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 D7844 *ASTM D7844	2 0 50 0 950 1050 995 1180 2600 <i>imit/base</i> >20 <i>imit/base</i> >3 >20 >30 30 <i>imit/base</i>	19 0 72 <1 1091 1903 1412 1738 5028 <i>current</i> 8 5 6 <i>current</i> 0.5 8.8 18.6 <i>current</i>	9 0 46 <1 736 1384 904 1180 3398 history1 8 2 3 history1 0.7 11.3 22.6 history1	 history2 history2 history2





OIL ANALYSIS REPORT







Apr21

14

13

8

Laboratory

Apr21/23

cSt (100°C)

Viscosity @ 100°C

VISUAL		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	11.2	11.6	
GRAPHS						
iron ickel			Sep8/23			
Non-ferrous Metals	5					
copper lead						

Sep 8/23

Sep8/23.

8.0

7.0

(B/HOX Bw) 17

4.0) 10 4.0 Munhar Nu 3.0 ase 2.0 1.0 0.0

Apr21/23

Base Number



Sample No. : PCA0093526 Received : 19 Sep 2023 3425 Tremley Point Road Lab Number : 05955099 Diagnosed : 21 Sep 2023 Unique Number : 10656312 Diagnostician : Jonathan Hester Test Package : FLEET Contact: Shop 1376 Oil Analysis Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. shop1376@transervice.com * - 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

Transervice - Shop 1376 - Berkeley-Linden

ep8/23

Linden, NJ

US 07036

T: