OIL ANALYSIS REPORT

Sample Rating Trend

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NORMAL

Area (31594ME) Walgreens - Tractor Machine Id [Walgreens - Tractor] 136D25693

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.

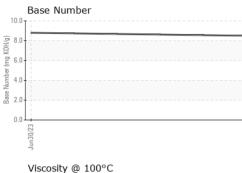
Fluid Condition

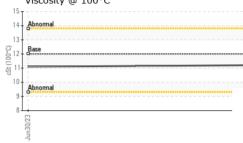
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110541	PCA0093495	
Sample Date		Client Info		06 Nov 2023	30 Jun 2023	
Machine Age	mls	Client Info		75751	75751	
Oil Age	mls	Client Info		75751	75751	
Oil Changed		Client Info		Changed	Changed	
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	>110	35	18	
Chromium	ppm	ASTM D5185m	>4	<1	<1	
Nickel	ppm	ASTM D5185m	>2	<1	<1	
Titanium	ppm	ASTM D5185m		11	4	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>25	4	1	
Lead	ppm	ASTM D5185m	>45	<1	0	
Copper	ppm	ASTM D5185m	>85	1	<1	
Tin	ppm	ASTM D5185m	>4	0	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method			history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 21	history1 15	history2
	ppm ppm				history1 15 0	history2
Boron Barium		ASTM D5185m	2	21	15	
Boron	ppm	ASTM D5185m ASTM D5185m	2 0	21 0	15 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	21 0 46	15 0 53	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	21 0 46 <1	15 0 53 <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	21 0 46 <1 832	15 0 53 <1 791	
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	21 0 46 <1 832 1174	15 0 53 <1 791 1172	
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	21 0 46 <1 832 1174 1031	15 0 53 <1 791 1172 1008	
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 50 950 1050 995 1180	21 0 46 <1 832 1174 1031 1248	15 0 53 <1 791 1172 1008 1184	
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 ASTM D5185m	2 0 50 950 1050 995 1180 2600	21 0 46 <1 832 1174 1031 1248 3177	15 0 53 <1 791 1172 1008 1184 3553	
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 ASTM D5185m	2 0 50 950 1050 995 1180 2600	21 0 46 <1 832 1174 1031 1248 3177 current	15 0 53 <1 791 1172 1008 1184 3553 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 method ASTM D5185m	2 0 50 950 1050 995 1180 2600	21 0 46 <1 832 1174 1031 1248 3177 current 4	15 0 53 <1 791 1172 1008 1184 3553 history1 3	 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 method ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >30	21 0 46 <1 832 1174 1031 1248 3177 current 4 1	15 0 53 <1 791 1172 1008 1184 3553 history1 3 0	 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 limit/base >30	21 0 46 <1 832 1174 1031 1248 3177 current 4 1 6	15 0 53 <1 791 1172 1008 1184 3553 history1 3 0 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 ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >30 -20 limit/base	21 0 46 <1 832 1174 1031 1248 3177 current 4 1 6 current	15 0 53 <1 791 1172 1008 1184 3553 history1 3 0 2 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 limit/base >30 20 limit/base >20	21 0 46 <1 832 1174 1031 1248 3177 current 4 1 6 current 0.4	15 0 53 <1 791 1172 1008 1184 3553 history1 3 0 2 history1 0.3	 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 ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >30 limit/base >20	21 0 46 <1 832 1174 1031 1248 3177 current 4 1 6 current 0.4 9.1	15 0 53 <1 791 1172 1008 1184 3553 history1 3 0 2 history1 0.3 6.8	 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 0 50 0 950 1050 995 1180 2600 imit/base >30 20 imit/base >30 >20 >30	21 0 46 <1 832 1174 1031 1248 3177 <i>current</i> 4 1 6 <i>current</i> 0.4 9.1 17.9 <i>current</i>	15 0 53 <1 791 1172 1008 1184 3553 history1 3 0 2 history1 0.3 6.8 18.2 history1	 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 TS ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	2 0 50 1050 955 1050 995 1180 2600 imit/base >30 imit/base >3 20	21 0 46 <1 832 1174 1031 1248 3177 current 4 1 6 current 0.4 9.1 17.9	15 0 53 <1 791 1172 1008 1184 3553 history1 3 0 2 history1 0.3 6.8 18.2	 history2 history2 history2 history2



OIL ANALYSIS REPORT





	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	
Nov6/23	Appearance	scalar	*Visual	NORML	NORML	NORML	
No	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	12.00	11.2	11.1	
	GRAPHS						
	Ferrous Alloys						
:	35 30 30 30 30 30 30 30 30 30 30 30 30 30						
	25						
mdd	15						
	10-						
	5						
	Jun30/23 -			Nov6/23 -			
	Jun3			Nov			
	Non-ferrous Metals	5					
	10 copper						
	8 - tin						
	6-						
mqq							
<u>L</u>	4						
	2						
	2-						
	0						
	Jun30/23			Nov6/23			
				Z			
	Viscosity @ 100°C				Base Number		
				9.			
	-			8.	1		
	13			(B)7. (B)HOX B(B) (B) (B) (B) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	0		
cSt (100°C)	12 - Base				0		
cSt (1	11				0		
	10			Na 3.	0		
	Abnormal 9 -						
				1.	0		

0.0

lun30/73

Nov6/23 -

: 10 Nov 2023

: 13 Nov 2023



Unique Number
: 10738595
Diagnostician
: Wes Davis

Certificate L2367
Test Package
: FLEET
Control of the Control of

: PCA0110541

: 06004833

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

Received

Diagnosed

Laboratory Sample No.

Lab Number

Vov6/23 +-

Transervice - Shop 1376 - Berkeley-Linden 3425 Tremley Point Road Linden, NJ US 07036 Contact: Shop 1376 Oil Analysis shop1376@transervice.com T: 06:2012) F: