

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



425

Machine Id

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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 INFORM Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINATI Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper	mls mls	method Client Info Client Info Client Info Client Info Client Info Client Info Method WC Method WC Method WC Method WC Method ASTM D5185m	limit/base >5 >0.2 limit/base >100 >20 >4 >3 >20	current PCA0043270 24 Apr 2023 240710 15000 Changed NORMAL current <1.0 NEG NEG current 31 2 <1 <1 <1	history1 history1 history1	history2 history2 history2
Sample Date Machine Age Oil Age Oil Age Oil Changed Sample Status CONTAMINATI Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead	on ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info MC Method WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >100 >20 >4 >3	24 Apr 2023 240710 15000 Changed NORMAL	history1 history1	history2 history2
Machine Age Oil Age Oil Age Oil Changed Sample Status CONTAMINATI Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead	on ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info MC Method WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >100 >20 >4 >3	240710 15000 Changed NORMAL current <1.0 NEG NEG current 31 2 <1 <1	history1 history1 history1	history2 history2 history2
Oil Age Oil Changed Sample Status CONTAMINATI Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead	on ppm ppm ppm ppm ppm	Client Info Client Info Client Info method WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >100 >20 >4 >3	15000 Changed NORMAL current <1.0 NEG NEG 2 current 31 2 <1 <1	history1 history1 history1	history2 history2 history2
Oil Changed Sample Status CONTAMINATI Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead	ppm ppm ppm ppm ppm	method WC Method WC Method WC Method MC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >100 >20 >4 >3	Changed NORMAL current <1.0 NEG NEG 2 current 31 2 <1 <1	history1 history1 history1	history2 history2 history2
Sample Status CONTAMINATI Fuel Water Glycol WEAR METALS ron Chromium Nickel Titanium Silver Aluminum Lead	ppm ppm ppm ppm ppm	method WC Method WC Method WC Method Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >100 >20 >4 >3	NORMAL current <1.0 NEG NEG current 31 2 <1 <1	history1 history1 history1	history2 history2 history2
CONTAMINATI Fuel Water Glycol WEAR METALS fron Chromium Nickel Titanium Silver Aluminum Lead	ppm ppm ppm ppm ppm	WC Method WC Method WC Method Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >100 >20 >4 >3	current <1.0 NEG NEG current 31 2 <1 <1	history1 history1	history2 history2
Fuel Water Glycol WEAR METALS ron Chromium Nickel Titanium Silver Aluminum Lead	ppm ppm ppm ppm ppm	WC Method WC Method WC Method Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >100 >20 >4 >3	<1.0 NEG NEG current 31 2 <1	history1	 history2
Water Glycol WEAR METALS fron Chromium Nickel Fitanium Silver Aluminum Lead	ppm ppm ppm ppm ppm	WC Method WC Method method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 limit/base >100 >20 >4 >3	NEG NEG current 31 2 <1 <1	history1	history2
Glycol WEAR METALS ron Chromium Nickel Fitanium Silver Aluminum Lead	ppm ppm ppm ppm ppm	WC Method method ASTM D5185m	limit/base >100 >20 >4 >3	NEG	 history1 	history2
WEAR METALS ron Chromium Nickel Titanium Silver Aluminum Lead	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >4 >3	current 31 2 <1 <1	history1	history2
ron Chromium Nickel Fitanium Silver Aluminum _ead	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >4 >3	31 2 <1 <1		
Chromium Nickel Fitanium Silver Aluminum Lead	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >4 >3	2 <1 <1		
Nickel Fitanium Silver Aluminum Lead	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>4	<1 <1		
Fitanium Silver Aluminum Lead	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>3	<1		
Silver Aluminum Lead	ppm	ASTM D5185m ASTM D5185m				
Aluminum _ead	ppm	ASTM D5185m		0		
.ead			>20	U		
	ppm	ΔSTM D5185m		4		
Copper		UO LINI DO LOOTII	>40	2		
	ppm	ASTM D5185m	>330	2		
īn	ppm	ASTM D5185m	>15	0		
/anadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	26		
Barium	ppm	ASTM D5185m	0	0		
Nolybdenum	ppm	ASTM D5185m	60	71		
Manganese	ppm	ASTM D5185m	0	<1		
/lagnesium	ppm	ASTM D5185m	1010	764		
Calcium	ppm	ASTM D5185m	1070	1314		
Phosphorus	ppm	ASTM D5185m	1150	953		
Zinc	ppm	ASTM D5185m	1270	1175		
Sulfur	ppm	ASTM D5185m	2060	3258		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9		
Sodium	ppm	ASTM D5185m		10		
Potassium	ppm	ASTM D5185m	>20	4		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.9		
Nitration	Abs/cm	*ASTM D7624	>20	11.3		
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0		
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.2		



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 05829457 Unique Number : 10442950

: PCA0043270 Test Package : MOB1+

Received : 25 Apr 2023 Tested : 26 Apr 2023

Diagnosed : 26 Apr 2023 - Wes Davis **LEFEBVRE AND SONS** 10895 171ST AVE NW ELK RIVER, MN US 55330

Contact: JAY LEFEBVRE jay.lefebvre@leftruck.com T:

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)

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