

OIL ANALYSIS REPORT

(AU396U) Supermarket - Tractor FREIGHTLINER 107A1826

Component Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Fluid

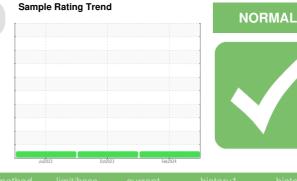
All component wear rates are normal.

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	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0116967	PCA0104079	PCA0099841
Sample Date		Client Info		19 Feb 2024	31 Oct 2023	11 Jul 2023
Machine Age	mls	Client Info		261997	244363	227662
Oil Age	mls	Client Info		17634	16701	18743
Oil Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	13	29	13
Chromium	ppm	ASTM D5185m	>5	<1	1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>30	4	7	6
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	4	11	7
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	2	0
Barium	ppm	ASTM D5185m	0	<1	4	0
Molybdenum	ppm	ASTM D5185m	50	65	70	66
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	950	879	894	947
Calcium	ppm	ASTM D5185m	1050	992	1114	1150
Phosphorus	ppm	ASTM D5185m	995	862	933	1016
Zinc	ppm	ASTM D5185m	1180	1139	1205	1282
Sulfur	ppm	ASTM D5185m	2600	2667	2793	3503
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4	6	4
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	4	5	3
						history2
INFRA-RED		method	IIIIII/Dase	ourront	· ····································	····otor j =
Soot %	%	*ASTM D7844	>3	0.6	1.1	0.7
	% Abs/cm					
Soot %		*ASTM D7844	>3	0.6	1.1	0.7

14.7

8.0

Oxidation

Abs/.1mm *ASTM D7414 >25

Base Number (BN) mg KOH/g ASTM D2896

15.0

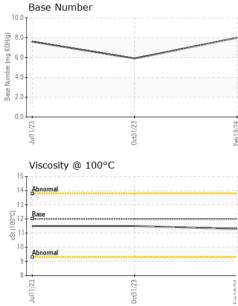
7.6

17.5

5.9



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	White Metal Yellow Metal	scalar	*Visual	NONE	NONE NONE	NONE	NONE
		scalar	*Visual	NONE		NONE	NONE
	Precipitate Silt	scalar scalar	*Visual *Visual	NONE NONE	NONE NONE	NONE	NONE NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
Feb19/24	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	FLUID PROP	PERTIES	method	limit/base	current	history1	histor
	Visc @ 100°C	cSt	ASTM D445	12.00	11.3	11.5	11.5
	GRAPHS						
	Ferrous Alloys						
VC/G	25 - iron	\wedge					
E-410.79.1	20						
	튭 15						
	10						
	5 -						
			184				
	33	/23 -		1/24			
	Jul11/23	0ct31/23		Feb19/24			
	Non-ferrous Me						
		tals					
	12 T	tals					
	12 copper						
	12 10 copper lead						
	12 10 8						
	12 10 copper lead						
	12 10 8						
	12 10 10 10 10 10 10 10 10 10 10						
	12 10 8						
	12 10 8 6 4 2 0						
	12 10 8 6 4 2 0			b19/24			
	12 10 10 10 10 10 10 10 10 10 10 10 10 10	0ct31/23		Feb19/24			
	Viscosity @ 100	0ct31/23			Base Numb	er	
	Viscosity @ 100	0ct31/23			.o T	er	
	Viscosity @ 100	0ct31/23		9	.0	er	
	Viscosity @ 100	0ct31/23		9	.0	er	
	Viscosity @ 100	0ct31/23		9	.0	er	
	Viscosity @ 100	0ct31/23		9	.0	er	
	Viscosity @ 100	0ct31/23		9	.0	er	
	Uiscosity @ 100	0ct31/23		9 8 (0,17 6) 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,		er	
	12 10 10 10 10 10 10 10 10 10 10	0ct31/23		9 8 (0,7 6) 1 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8		er	
	Uiscosity @ 100	0.6C		9 8 (6)(10) 5 9 9 10)(10) 10 10 10 10 10 10 10 10 10 10 10 10 10			
	Uiscosity @ 100	0ct31/23		9 8 (0,7 6) 1 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8		er	
v	Viscosity @ 100	0cc31/23		9 8 8 9 7 9 7 8 8 8 9 7 9 7 8 8 9 7 9 7		0ct31/23 -	Supermarket-D
У.	Uiscosity @ 100	0cc31/23		9 8 8 9 7 9 7 8 8 8 9 7 9 7 8 8 9 7 9 7		EXIEPHO ervice - Shop 1071 - S	
o .	Viscosity @ 100	p°C	ived : 2	9 8 (07 HOO 6 9 9 8 9 9 9 8 9 9 9 8 9 9 9 8 9 9 9 8 9 9 9 8 9		EXIEPHO ervice - Shop 1071 - S	0 A Tower F
o. Der ber	Viscosity @ 100 Viscosity @ 100	p°C	ived : 2 ed : 2	y, NC 27513 1 Feb 2024	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EXIEPHO ervice - Shop 1071 - S	Supermarket-Da 0 A Tower F Dayton US 08
o. oer ber ige	Viscosity @ 100 Viscosity @ 100 Viscos	501 Madisc Rece Teste Diagr	ived : 2 ed : 2 nosed : 2	y, NC 27513 1 Feb 2024 1 Feb 2024 - V	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ervice - Shop 1071 - S 60 Conta	0 A Tower F Dayton

