

OIL ANALYSIS REPORT

(AU677W) Supermarket - Tractor Machine Id FREIGHTLINER 107A1829

Component Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Fluid

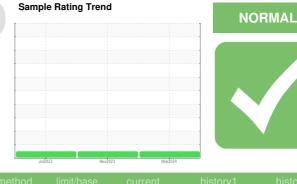
All component wear rates are normal.

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 INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0116484	PCA0111546	PCA0100403
Sample Date		Client Info		12 Mar 2024	17 Nov 2023	19 Jul 2023
Machine Age	mls	Client Info		301630	286794	270404
Oil Age	mls	Client Info		14836	16390	18592
Oil Changed		Client Info		Changed	Changed	Changed
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	10	12	14
Chromium	ppm	ASTM D5185m	>5	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	5	4	7
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>150	2	3	3
Tin	ppm	ASTM D5185m	>5	1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	3	4	3
Barium	ppm	ASTM D5185m	0	1	2	0
Molybdenum	ppm	ASTM D5185m	50	63	62	66
Manganese	ppm	ASTM D5185m	0	1	0	<1
Magnesium	ppm	ASTM D5185m	950	944	877	1012
Calcium	ppm	ASTM D5185m	1050	1102	1118	1185
Phosphorus	ppm	ASTM D5185m	995	979	953	1052
Zinc	ppm	ASTM D5185m	1180	1205	1179	1273
Sulfur	ppm	ASTM D5185m	2600	3050	3578	3527
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	5	3	3
Sodium	ppm	ASTM D5185m		<1	0	2
Potassium	ppm	ASTM D5185m	>20	5	3	1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	7.4	7.6	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	19.2	19.4
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	15.0	15.3

8.6

Base Number (BN) mg KOH/g ASTM D2896

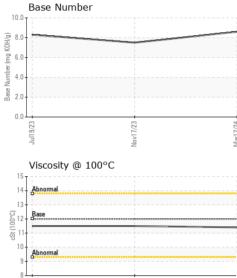
8.3

7.5



Jul19/23

OIL ANALYSIS REPORT



			VISUAL		method	limit/base	current	history1	history2
		v	Vhite Metal	scalar	*Visual	NONE	NONE	NONE	NONE
		Y	ellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
		F	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
		S	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
		D	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
		S	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Vov17/23 -	2/24 -	A	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Nov	Mar12/24	C	Ddor	scalar	*Visual	NORML	NORML	NORML	NORML
		E	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
		F	Free Water	scalar	*Visual		NEG	NEG	NEG
			FLUID PROPE	RTIES	method	limit/base	current	history1	history2
		V	/isc @ 100°C	cSt	ASTM D445	12.00	11.4	11.5	11.5
			GRAPHS						
1		14.	Ferrous Alloys						
	Y C	12.	iron						
//////////////////////////////////////	(C 1~1		nickel						
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			Jul19/23	Nov17/23		Mar12/24			
			Jul	Nov		Mar			
		10	Non-ferrous Metal	S					
		10.	copper						
		8.	nananananana lead						
		6. E							
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		2.	•						
		0.		and the second se	NAMES OF TAXABLE PARTY.	THE REAL PROPERTY.			
		0.	Jul19/23	7/23		2/24 -			
			Jult	Nov17/23		Mar12/24			
			Viscosity @ 100°C				Raco Number		
		15.				9.	Base Number		
		14	Abnormal			8.	1		
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		÷ 12-	Base			Ø 6	0		
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		8				Mun 3	0		
			+			ase 2	0		
		10	Abnormal				0-		
		10· 9.	Abnormal						
				33				23	
				/17/23				17/23	
			Abnormal 	Nov17/23			0	Nov17/23 +	
d	Laboratory	9. 8. : We	earCheck USA - 50	1 Madiso			Jul19/23	e - Shop 1072 - Sup	
AB	Sample No.	9. 8. : We : PC	earCheck USA - 50 CA0116484	1 Madiso Rece	ived : 25	2, NC 27513 5 Mar 2024	Jul19/23	e - Shop 1072 - Sup	Division Stre
	Sample No. Lab Number	9 8 : We : PC : 06	earCheck USA - 50 CA0116484 127522	1 Madiso Rece Teste	ived : 25 ed : 26	e, NC 27513 5 Mar 2024 6 Mar 2024	ranservic	e - Shop 1072 - Sup	Division Stre Elizabeth,
	Sample No. Lab Number Unique Number	9 8 : We : PC : 06 : 10	earCheck USA - 50 CA0116484 127522 941673	1 Madiso Rece Teste	ived : 25 ed : 26	2, NC 27513 5 Mar 2024	ranservic	e - Shop 1072 - Su p 505	Division Stre Elizabeth, US 072
rate 12367	Sample No. Lab Number Unique Number Test Package	9 : We : PC : 06 : 10 : FL	earCheck USA - 50 CA0116484 127522 941673	1 Madiso Rece Teste Diagi	ived : 25 ed : 26 nosed : 26	r, NC 27513 5 Mar 2024 6 Mar 2024 6 Mar 2024 - V	ranservic	e - Shop 1072 - Sup 505 Contact: N	Division Stre Elizabeth,