

# **OIL ANALYSIS REPORT**

Sulfation

Oxidation

## (AU765S) Supermarket - Tractor FREIGHTLINER 107A8823 Component

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (11 GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

Fluid

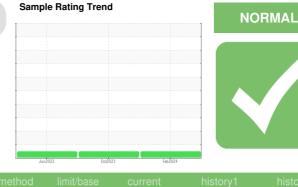
All component wear rates are normal.

#### 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	<b>/</b> ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0116960	PCA0104073	PCA0099865
Sample Date		Client Info		19 Feb 2024	21 Oct 2023	29 Jun 2023
Machine Age	mls	Client Info		265275	255714	244805
Oil Age	mls	Client Info		9561	10909	11382
Oil Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	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 METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	12	19	11
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	4	5	4
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>150	2	4	3
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	6	3	6
Barium	ppm	ASTM D5185m	0	0	0	2
Molybdenum	ppm	ASTM D5185m	50	69	63	69
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	977	878	900
Calcium	ppm	ASTM D5185m	1050	1181	1050	1147
Phosphorus	ppm	ASTM D5185m	995	1086	903	1008
Zinc	ppm	ASTM D5185m	1180	1277	1155	1242
Sulfur	ppm	ASTM D5185m	2600	3339	2271	3174
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	5	5	4
Sodium	ppm	ASTM D5185m		2	2	<1
Potassium	ppm	ASTM D5185m	>20	1	3	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	7.0	8.9	8.3
0.16.17						

18.6

14.2

8.7

Abs/.1mm \*ASTM D7415 >30

Abs/.1mm \*ASTM D7414 >25

FLUID DEGRADATION method

Base Number (BN) mg KOH/g ASTM D2896

21.1

16.6

6.2

19.8

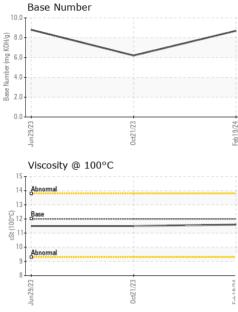
15.3

8.8



# **OIL ANALYSIS REPORT**

VISUAL



	VISUAL		method	limit/base		history1	history
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor			NORML			NORML
		scalar	*Visual		NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROP		method	limit/base	current	history1	history
	Visc @ 100°C	cSt	ASTM D445	12.00	11.6	11.5	11.5
	GRAPHS						
	Ferrous Alloys	-					
	iron chromium						
	15 - nickel						
	Eng						
	B 10						
	5						
		****					
	3/23	1/23		9/24 -			
	Jun29/23	0ct21/23		Feb 19/24			
	Non-ferrous Met	als					
	10 copper						
	8 and						
	tin						
	6						
	E d d						
	2-						
	0						
	1/23 U	/23		/24			
	Jun29/23	0ct21/23		Feb 19/24			
	→ Viscosity @ 100°				·		
	<sup>15</sup>	-		9.0	Base Number	-	
	14 - Abnormal	1		8.0			
	13					> /	and the second se
				H 6.0			
	ට්.0012 දේ 11			(6/H0) 6.0 (6/H0) 60 (6/H0) 5.0 (6/H0) 50 (6/H0) 50 (6/H			
	रहु 11 <del>-</del>			<sup>4</sup> 4.0	-		
	10 - Abnormal			≥ 3.0 ≋			
	Abnormal 9			2.0 1.0			
	8			0.0			
	9/23	1/23		9/24 .	9/23	1/23 -	
	<sup>12</sup>	0ct21		Feb1	Jun2.	0ct21	
	Jun29/23 -	0ct21/23 -		Feb19/24 -	Jun29/23 -	0ct21/23	
	- : WearCheck USA - 5 : PCA0116960	01 Madiso <b>Recei</b>		, NC 27513 8 Mar 2024	Transerv	rice - Shop 1071 - Si 60	
	: WearCheck USA - 5		ved : 18		Transerv		A Tower F
r r	: WearCheck USA - 5 : PCA0116960 : <mark>06120721</mark> : 10929554	Recei	<b>ved</b> : 18 <b>d</b> : 19	3 Mar 2024			A Tower F Dayton
r r	: WearCheck USA - 5 : PCA0116960 : <mark>06120721</mark>	Recei Teste Diagr	ved : 18 d : 19 iosed : 19	8 Mar 2024 9 Mar 2024 Mar 2024 - W		60 Conta	A Tower F Dayton US 08 act: Brian Q transervice.

