

OIL ANALYSIS REPORT

Sample Number

mls

mls

Sample Date

Machine Age

Oil Changed

Sample Status

CONTAMINATION

Oil Age

Fuel

Water

(AU667W) Supermarket - Tractor FREIGHTLINER 107A1806 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

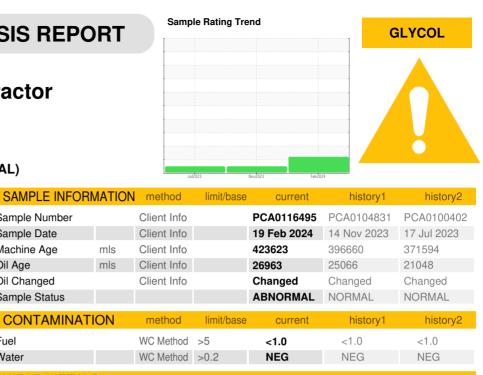
All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

Fluid Condition

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



WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	D5185m >80 16		17	23
Chromium	ppm	ASTM D5185m	>5	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	10	6	8
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	3	4	4
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

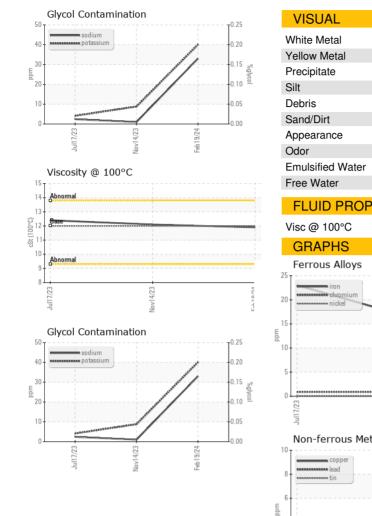
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	2	5	17
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	50 60		34
Manganese	ppm	ASTM D5185m	0 <1		<1	<1
Magnesium	ppm	ASTM D5185m	950	871	737	292
Calcium	ppm	ASTM D5185m	1050	1210	1350	2208
Phosphorus	ppm	ASTM D5185m	995	989	1012	990
Zinc	ppm	ASTM D5185m	1180	1159	1199	1228
Sulfur	ppm	ASTM D5185m	2600	2701	2790	3980
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	6	6	11

Sodium	ppm	ASTM D5185m		33	1	2
Potassium	ppm	ASTM D5185m	>20	4 0	9	4
Glycol	%	*ASTM D2982		NEG	NEG	NEG
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	. 2	4	-	-
3001 %	70	ASTIVI D7044	>0	1	I	I
Nitration	Abs/cm	*ASTM D7624	>20	8.7	8.5	8.7
Nitration	ADS/CIT	A0 HVI D7024	~20	0.7	0.0	0.7

Sullation	AUS/.IIIIII	A3110107413	>30	21.2	22.1	22.2
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	16.6	15.2
Base Number (BN)	mg KOH/g	ASTM D2896		5.8	6.7	6.2



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nation	T 0.25	VISUAL		method	limit/base	current	history1	history2
	-0.20	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	0.15 gg	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
	0.10 8	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
and the second sec	0.05	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	L _{0.00}	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Nov14/23 . Feb19/24 .	0.00	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Nov1 Feb1		Odor	scalar	*Visual	NORML	NORML	NORML	NORML
°C		Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
		Free Water	scalar	*Visual		NEG	NEG	NEG
		FLUID PROPE	RTIES	method	limit/base	current	history1	history2
		Visc @ 100°C	cSt	ASTM D445	12.00	11.9	12.1	12.4
		GRAPHS						
		Ferrous Alloys						
		25						
Vov14/23	10 D 1	20 - nickel						
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	0.15 ag	5-						
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		Jul 17/23	Nov14/23		Feb19/24			
and the second s	0.05	InL	Nov		Feb			
	1 _{0.00}	Non-ferrous Metals	5					
Nov14/23 Feb19/24		10 copper						
No Pe		8 - Researcher lead						
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		4-						
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		2// thu	Nov14/23		Feb 1 9/2 4			
			Nov		Fet			
		Viscosity @ 100°C				Base Number		
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		14 Abnormal			6.0			
		13			HOX 5.0)		
		0012 Base			<u>ڦ</u> 4.0	D -		
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		Abnormal 9 -			1.0			
		8				J.		
		Jul17/23	Nov14/23		Feb19/24	Jul17/23	Nov14/23	Feb19/24
		lu C	Nov		Feb	lul L	Nov	Feb
	ratory	: WearCheck USA - 501	Madiso	on Ave., Carv	NC 27513	Transervice	- Shop 1072 - Sur	ermarket-Elizabeth
		: PCA0116495	Rece		Feb 2024			Division Street
Lab N	Number	: 06099578	Teste	ed : 28	8 Feb 2024			Elizabeth, NJ
		: 10897808			Feb 2024 - Jonat	han Hester		US 07207
		: FLEET (Additional Tes			,			Iormand Brizak
		contact Customer Servic are outside of the ISO 17					nonzak@t	ranservice.com T:
		ecifications are based of				rule (JCGM 106:	2012)	F: