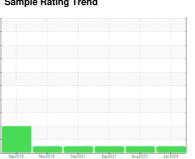


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



FREIGHTLINER 470660

Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

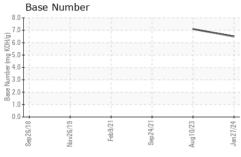
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

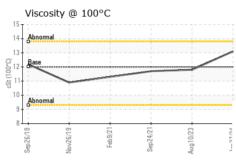
GAL)		Sep2018	Nov2019 Feb2021	Sep2021 Aug2023	Jan2024	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0105586	PCA0099125	PCA0050496
Sample Date		Client Info		27 Jan 2024	10 Aug 2023	24 Sep 2021
Machine Age	mls	Client Info		403351	379709	274624
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	TION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<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	>90	78	47	47
Chromium	ppm	ASTM D5185m	>20	4	1	2
Nickel	ppm	ASTM D5185m	>2	1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	2
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	6	4	6
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	3	2	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	12	9	4
Barium	ppm		0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	70	74	64
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	1007	1049	993
Calcium	ppm	ASTM D5185m	1050	1189	1246	1172
Phosphorus	ppm	ASTM D5185m	995	1104	1095	1051
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m	1180	1405 3338	1332 3659	1249 2723
CONTAMINAN		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10	9	6
Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	>20	3 7	3	5 5
INFRA-RED	Please	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.8	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	13.5	12.0	13.2
Sulfation	Abs/.1mm	*ASTM D7415		25.0	21.8	24.8
FLUID DEGRA			limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.2	19.7	22
Base Number (BN)	mg KOH/g	ASTM D2896		6.5	7.1	



OIL ANALYSIS REPORT

GRAPHS

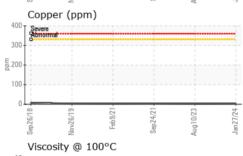


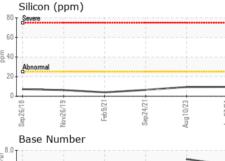


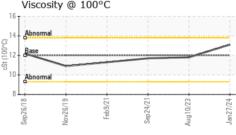
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

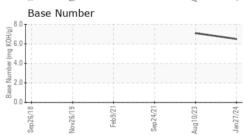
FLUID FROF		memod			HISTOLAL	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	12.00	13.1	11.8	11.7

Iron (ppm)		Lead (ppm)							
Severe			80 Severe		!				
0 - Abnormal			60 - Abnor	mal					
0			20						
Sep26/18 +	Sep24/21-	Aug10/23 + -	Sep26/18	Nov26/19 -	Feb 9/21-	Sep24/21-	Aug10/23		
Aluminum (ppm)	03	∢ ¬	Chro	z mium (p	pm)	0,	A		
O Selvere			40 Severe		1				
Abnorma			20 Abnon	mal					
O Automa			40						











Laboratory Sample No.

Lab Number : 06107191

: PCA0105586 Unique Number: 10910688

Test Package : MOB 1 (Additional Tests: TBN)

Received **Tested** Diagnosed

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 04 Mar 2024 : 05 Mar 2024

: 05 Mar 2024 - Wes Davis

1197 NORTH MAIN ROAD VINELAND, NJ US 08360

MILLER TRUCK LEASING #116

Contact: GARY PRICE gprice@millertransgroup.com T: (856)696-4848

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) F: (856)696-5629 Contact/Location: GARY PRICE - MILVIN