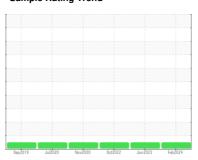


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **690280**

Component

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

Fluid Condition

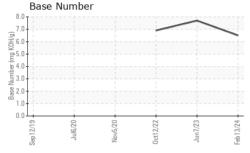
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

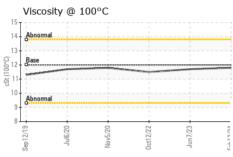
GAL)		Sep2019	Jul2020 Nov2020	0ct2022 Jun2023	Feb2024	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0113636	PCA0097816	PCA0079739
Sample Date		Client Info		13 Feb 2024	07 Jun 2023	12 Oct 2022
Machine Age	mls	Client Info		203516	180017	162844
Oil Age	mls	Client Info		23499	15005	10000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINA	TION	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 METAI	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	35	19	33
Chromium	ppm	ASTM D5185m	>20	2	1	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	23	14	19
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	19	8	14
Tin	ppm	ASTM D5185m	>15	3	1	2
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	8	2
Barium	ppm	ASTM D5185m	0	2	2	0
Molybdenum	ppm	ASTM D5185m	50	63	62	62
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	857	803	924
Calcium	ppm	ASTM D5185m	1050	1252	1123	1119
Phosphorus	ppm	ASTM D5185m	995	995	955	913
Zinc	ppm	ASTM D5185m	1180	1238	1138	1194
Sulfur	ppm	ASTM D5185m	2600	3106	2812	2958
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	16	7	9
Sodium	ppm	ASTM D5185m		2	0	4
Potassium	ppm	ASTM D5185m	>20	14	8	16
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.9	0.7	1.3
Nitration	Abs/cm	*ASTM D7624	>20	9.6	8.4	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	20.3	24.1
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	16.4	18.9
Base Number (BN)	mg KOH/g			6.5	7.7	6.9
	- 0					



OIL ANALYSIS REPORT

GRAPHS

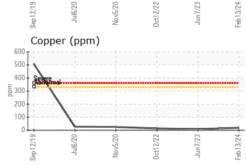


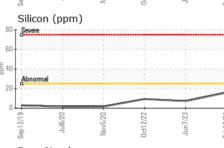


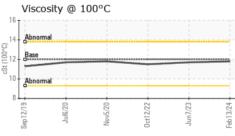
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	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

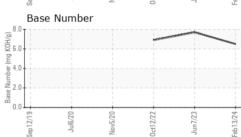
FLUID PROPE	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.8	11.7	11.5

Iron (ppm))				100-	Lead ((ppm)		
Severe					80 -	Severe			
Abnormal					E 60 -	Abnorma			
)+					20 -				
Sep12/19	Nov5/20 +	Oct12/22	Jun7/23 +	Feb13/24	0.1	Sep12/19	Jul6/20	Nov5/20	Oct12/22
Aluminum	(ppm)				50 -	Chron	nium (p	pm)	
Severe					40 -	Severe			
Abnormal					E 30 -	Abnorma			











Laboratory Sample No.

Lab Number : 06124709 Unique Number : 10938860

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0113636

Test Package : MOB 1 (Additional Tests: TBN)

Received **Tested** Diagnosed

: 21 Mar 2024 : 22 Mar 2024

: 23 Mar 2024 - Don Baldridge

US 08085 Contact: ED DAVIS edavis@millertransgroup.com T: (856)214-3521

MILLER TRUCK LEASING #114

63 REPAUPO STATION ROAD

LOGAN TOWNSHIP, NJ

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)214-3663 Contact/Location: ED DAVIS - MILLOG