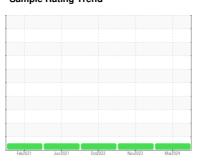


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **390480**

Component **Diesel Engine**

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

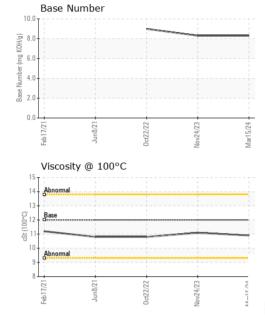
Fluid Condition

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

QTS)		Feb2021	Jun2021	Oct2022 Nov2023	Mar2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0119039	PCA0112256	PCA0076730
Sample Date		Client Info		15 Mar 2024	24 Nov 2023	22 Oct 2022
Machine Age	mls	Client Info		237408	16361	46632
Oil Age	mls	Client Info		237408	16361	46632
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	>100	18	14	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		11	<1	5
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	4	7
Lead	ppm	ASTM D5185m	>40	2	3	6
Copper	ppm	ASTM D5185m	>330	3	<1	2
Tin	ppm	ASTM D5185m	>15	<1	1	1
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	10	4	7
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	54	63	59
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	892	962	703
Calcium	ppm	ASTM D5185m	1050	1317	1212	1276
Phosphorus	ppm	ASTM D5185m	995	1181	1176	966
Zinc	ppm	ASTM D5185m	1180	1337	1392	1142
Sulfur	ppm	ASTM D5185m	2600	3458	3396	3473
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	3	3
Sodium	ppm	ASTM D5185m		11	4	3
Potassium	ppm	ASTM D5185m	>20	3	1	3
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.3	1.3	1.4
Nitration	Abs/cm	*ASTM D7624	>20	10.9	11.2	11.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	21.0	22.8
	ATION	mothod	limit/base	current	history1	history2
FLUID DEGRAI	JATION	method	IIIIII/Dase	Current	HISTOLAL	HISTOLYZ
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	18.1	18.3



OIL ANALYSIS REPORT



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 PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.9	11.1	10.8

GRAPHS								
Iron (ppm)				Lead (ppm)			
Severe				100 - Severe				
				00				
Abnormal				Abnorma				
				20				
-12//21-	122	/23	1,24	0 1/2/	9/21	122-	1/23	
Feb17/21 Jun8/21	0ct22/22	Nov24/23	Mar15/24	Feb17/21	Jun8/21	0ct22/22	Nov24/23	
Aluminum (ppm	1)			Chron	nium (ppm	1)		
Severe				50 Severe				
				20				
Abnormal				Abnorma				
				10				
12	- 22	- 53	24	0 12	21-	- 22	- 53	
Feb17/21	0ct22/22	Nov24/23	Mar15/24	Feb17/21	Jun8/21	0ct22/22	Nov24/23	
Copper (ppm)		_	_	Silicon	(ppm)		_	
Severe Abnormal				80 - Severe				
				60				
i i				E 40				
				Abnorma				
				Abnorma 20			1 1 1 1 1 1	
	2	8	47	20 Abnorma		2	en	
eb 17/21	ct22/22	ov24/23 +	ar15/24	20 Abnorma		1042/22	ov24/23	
Viscosity @ 100	00422/22	Nov24/23 +	Mar15/24	Panouma Panouma	Jun8/21-	0ct22/22	Nov24/23	
Viscosity @ 100		Nov24/23	Mar15/24	Abnormal 20 12/2/19		0c22/22	Nov24/23	
ш.		Nov24/23	Mar15/24	Abnormal 20 12/2/19	Jun8/21-	00427/2	Nov24/23	
Viscosity @ 100		Nov24/23	Mar15/24	Abnormal 20 12/2/19	Jun8/21-	042272	Nov24/23	
Viscosity @ 100		Nov24/23	Mart5,24	Abnormal 20 12/2/19	Jun8/21-	042272	Nov24/23	
Viscosity @ 100	o°C			Base I (10.0 1	-12/9unF			
Viscosity @ 100		Nov24/23	Mar15/24	20 Abnormal 20 Base 10.0	Jun8/21-	0422722	Nov24/23 Nov24/23	





Laboratory Sample No.

Lab Number : 06126144 Unique Number : 10940295

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0119039 Received : 22 Mar 2024 **Tested** : 22 Mar 2024

Diagnosed Test Package: MOB 1 (Additional Tests: TBN)

: 22 Mar 2024 - Wes Davis

MILLER TRUCK LEASING #118 2196 BENNETT ROAD PHILADELPHIA, PA US 19116

Contact: ROSTY VITER rviter@millertransgroup.com

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)

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T: (215)552-9832