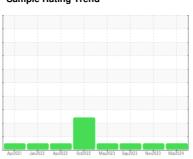


# **OIL ANALYSIS REPORT**

## Sample Rating Trend



NORMAL



Machine Id **681781** 

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.

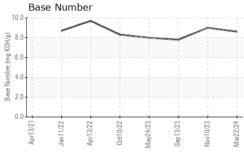
### **Fluid Condition**

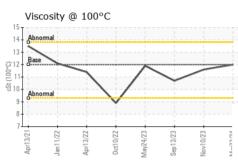
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

QTS)		Apr2021 J	lan2022 Apr2022 Oct20	22 May2023 Sep2023 Nov2023	Mar2024	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0093294	PCA0093336	PCA0093339
Sample Date		Client Info		22 Mar 2024	10 Nov 2023	13 Sep 2023
Machine Age	mls	Client Info		272556	262488	255673
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	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	6	1	10
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>4	0	1	0
Titanium	ppm	ASTM D5185m		5	5	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	2	1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	<1	3
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	20	14	30
Barium	ppm	ASTM D5185m	0	0	0	13
Molybdenum	ppm	ASTM D5185m	50	52	50	48
Manganese	ppm	ASTM D5185m	0	0	<1	0
Magnesium	ppm	ASTM D5185m	950	792	847	653
Calcium	ppm	ASTM D5185m	1050	1378	1108	1480
Phosphorus	ppm	ASTM D5185m	995	1073	1047	1006
Zinc	ppm	ASTM D5185m	1180	1285	1251	1214
Sulfur	ppm	ASTM D5185m	2600	3896	3334	3642
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	3	4
Sodium	ppm	ASTM D5185m		2	2	3
Potassium	ppm	ASTM D5185m	>20	2	2	10
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.6	6.2	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	18.1	19.5
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	13.9	15.3
Base Number (BN)	mg KOH/g	ASTM D2896		8.6	9.0	7.8



## **OIL ANALYSIS REPORT**





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
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID FNOF		memod			HISTOLAL	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	12.00	12.0	11.6	10.7

										-					-	
GR.	APH	S														
Iron	(ppm	1)						100	Lead	l (ppr	n)					
Severe								100 - 80 -	Severe							
								0.0								
Abnor	mal							udd 40	Abnor	mal			-			
·								20 -	·							
3/21	722	722	122	/23	/23	/23	124	0.1	3/21	/22	727	122	/23	/23	123	124
Apr13/2	Jan11/22	Apr13/22	Oct10/22	May24/23	Sep13/23	Nov10/23	Mar22/24		Apr13/21	Jan11/22	Apr13/22	Oct10/22	May24/23	Sep13/23	Nov10/23	Mar22/24
Alun	ninum	(ppn	1)						Chro	miun	n (ppr	m)				
Severe				;				50 - 40 -	Severe							
Ī																
Abnor	mal							ad 20 -	Abnor	mal			-			
								10-	·							
1/2/	722	722	722	73	/23	62/	74	0.1	121	727	722	727	/23	/23		2.4
Apr13/21	Jan11/22	Apr13/22	Oct10/22	May24/23	Sep13/23	Nov10/23 -	Mar22/24		Apr13/21	Jan11/22	Apr13/22	Oct10/22	May24/23	Sep13/23	Nov10/23	10000
Cop	per (p	pm)							Silico	on (p	om)					
Severe	mal							80	Severe							
								60-								
								툆 40 -	Abnor	mal						
								20 -								
	22	722	722	- 62/	Sep13/23	Nov10/23	Mar22/24	0.1	Apr13/21	Jan11/22 +	Apr13/22	Oct10/22 -	73	/23	62/	- 70
12/8	-		_	24	2	2	122		Ē	Ξ	13	£	May24/23	Sep13/23	Nov10/23	ACI CC - IM
Apr13/21	Jan11/22	Apr13/22	Oct10/22	May	Sep	2	∑ E		A	- Ja	Ap	ő	Š	Š	2	400
		@ 100		May24/23.	Sep	No	Ma			⊸ Num		ŏ	Ĭ	Š	Ž	-
7	osity (			May	Sep	No	Ma	10.0		-		0	M.	ős	ž	_
	osity (			May	Sep	No	Ma	10.0		-		ŏ	W	š		
Abnor	osity (			May	S S S S S S S S S S S S S S S S S S S	N N	Wa	10.0		-		ŏ	W	os .		
Visco	osity (			May	das	N N	Wa	10.0		-		0	W	8		
Abnor	osity (			May24/23 May	Sep13/23 Sep	Nov10/23 + No	Mar2224 Ma	Base Number (mg KOH/g) -0.9 -0.9		-		Oct10/22	May24/23 + Mi	Sep13/23	Nov10/23	M-22774



Laboratory

Sample No. : PCA0093294

Lab Number : 06137159 Unique Number : 10956624

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

Received **Tested** Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 04 Apr 2024

: 04 Apr 2024 - Wes Davis

: 03 Apr 2024

US 19533 Contact: JAMEY RITZ jritz@millertransgroup.com T:

2666 LEISCZS BRIDGE RD

LEESPORT, PA

**MILLER TRUCK LEASING #117** 

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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