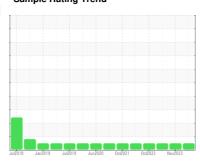


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



# Machine Id **498296**

Component **Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (16 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.

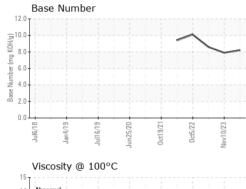
## **Fluid Condition**

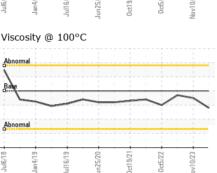
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

QTS)  Judits Jan2019 Judits Ju								
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		PCA0113571	PCA0105800	PCA0090008		
Sample Date		Client Info		16 Mar 2024	10 Nov 2023	11 Feb 2023		
Machine Age	mls	Client Info		214005	201824	172788		
Oil Age	mls	Client Info		12181	0	0		
Oil Changed		Client Info		Changed	N/A	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	30	34	48		
Chromium	ppm	ASTM D5185m	>20	<1	1	1		
Nickel	ppm	ASTM D5185m	>4	0	0	<1		
Titanium	ppm	ASTM D5185m		<1	0	0		
Silver	ppm	ASTM D5185m	>3	<1	0	0		
Aluminum	ppm	ASTM D5185m	>20	5	2	8		
Lead	ppm	ASTM D5185m	>40	6	11	6		
Copper	ppm	ASTM D5185m	>330	2	0	2		
Tin	ppm	ASTM D5185m	>15	1	0	1		
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	0	7		
Barium	ppm	ASTM D5185m	0	2	4	0		
Molybdenum	ppm	ASTM D5185m	50	63	62	72		
Manganese	ppm	ASTM D5185m	0	<1	0	1		
Magnesium	ppm	ASTM D5185m	950	887	857	956		
Calcium	ppm	ASTM D5185m	1050	1204	1301	1250		
Phosphorus	ppm	ASTM D5185m	995	1054	1023	1098		
Zinc	ppm	ASTM D5185m	1180	1226	1262	1359		
Sulfur	ppm	ASTM D5185m	2600	3307	3311	3317		
CONTAMINAN		method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	4	0	5		
Sodium	ppm	ASTM D5185m	00	3	0	6		
Potassium	ppm	ASTM D5185m		5	<1	4		
INFRA-RED		method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	1.5	2.1	2.4		
Nitration	Abs/cm	*ASTM D7624	>20	12.4	13.8	14.0		
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	25.1	24.7		
FLUID DEGRAI	DATION	method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.5	21.9	20.9		
Base Number (BN)	mg KOH/g	ASTM D2896		8.2	7.9	8.6		



# **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 PROPE	RTIES	method	limit/base	current	history1	history2	

Visc @ 100°C	cSt	ASTM D445	12.00	10.8	11.5		11.7	
GRAPHS								
Iron (ppm)				Lead (ppm)				
250 Severe				Severe				
				00				
Abnormal				40 Abnormal				
50				20				
Jul6/18 +	/20	3/21	/23	Jul6/18	719	12/8	/22	1/23
Jul6/18 Jan4/19 Jul16/19	Jun25/20	Oct19/21.	Nov10/23	Jul6/18 Jan4/19	Jul16/19 Jun25/20	Oct19/21	0ct5/22	Nov10/23
Aluminum (ppm) Chromium (ppm)								
40 Severe				Severe				
Abnormal			-	20 Abnormal				-
10		<u></u>	_	10				
Jul6/18 + Jan4/19 + Jul16/19 + -	Jun25/20 -	0ct19/21-	Nov10/23	Jul6/18	Jul16/19 -	Oct19/21-	0ct5/22	Nov10/23
, ,	JunZ	98	Nov1	,	. 7	Oct	0	Nov1
Copper (ppm)				Silicon (ppm	1)			
600				60				
				E 40				
200				Annormal				
0				0				
Jul6/18 - Jan4/19 - Jul16/19 -	Jun25/20	Oct19/21-	Nov10/23	Jul6/18 -	Jul16/19 -	Oct19/21-	Oct5/22 -	Nov10/23
, ,		9 0	Nov	,	, ,	00	ő	Nov
Viscosity @ 100°C	; 			Base Numb	er			
14 Abnormal			undaaa -	(D) 12.0 (D) 10.0 8.0 8.0 8.0 4.0 4.0			$\overline{}$	
00012 Bac			-	BE 8.0				
in the state of th				4.0				
8				0.0				
Jul6/18 - Jan4/19 - Jul16/19 -	Jun25/20	0ct19/21	Nov10/23	Jul6/18 -	Jul16/19 -	Oct19/21-	Oct5/22	Nov10/23
L BL III	Jul	00	Nov	L E	Jun	00	ŏ	Nov





Laboratory

Sample No.

Lab Number : 06124547 Unique Number : 10938698

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0113571

Test Package: MOB 1 (Additional Tests: TBN)

Received : 21 Mar 2024 **Tested** : 21 Mar 2024 Diagnosed

: 21 Mar 2024 - Wes Davis

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)

Report Id: MILLOG [WUSCAR] 06124547 (Generated: 03/21/2024 16:33:30) Rev: 1

Contact/Location: ED DAVIS - MILLOG

F: (856)214-3663

US 08085