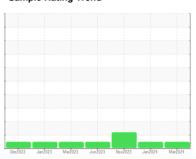


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



736797
Component
Diesel Engine

Machine Id

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

## 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 suitable for further service.

QTS)   Dw.2022 Jun2023 Mur2023 Jun2023 New2023 Jun2024 Mur2024							
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		PCA0121480	PCA0114596	PCA0112243	
Sample Date		Client Info		25 Mar 2024	17 Jan 2024	11 Nov 2023	
Machine Age	mls	Client Info		391462	0	329718	
Oil Age	mls	Client Info		391462	0	329718	
Oil Changed		Client Info		Changed	Not Changd	Changed	
Sample Status				NORMAL	NORMAL	ABNORMAL	
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	79	53	88	
Chromium	ppm	ASTM D5185m	>20	2	2	3	
Nickel	ppm	ASTM D5185m	>4	0	<1	<1	
Titanium	ppm	ASTM D5185m		<1	<1	3	
Silver	ppm	ASTM D5185m	>3	0	0	0	
Aluminum	ppm	ASTM D5185m	>20	10	8	9	
Lead	ppm	ASTM D5185m	>40	0	<1	0	
Copper	ppm	ASTM D5185m	>330	5	8	11	
Tin	ppm	ASTM D5185m	>15	<1	1	<1	
Vanadium	ppm	ASTM D5185m		0	<1	0	
Cadmium	ppm	ASTM D5185m		0	0	0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	14	18	2	
Barium	ppm	ASTM D5185m	0	0	0	2	
Molybdenum	ppm	ASTM D5185m	50	46	43	65	
Manganese	ppm	ASTM D5185m	0	1	<1	<1	
Magnesium	ppm	ASTM D5185m	950	712	608	932	
Calcium	ppm	ASTM D5185m	1050	1631	1576	1239	
Phosphorus	ppm	ASTM D5185m	995	1088	992	1007	
Zinc	ppm	ASTM D5185m	1180	1318	1204	1286	
Sulfur	ppm	ASTM D5185m	2600	3145	2560	3185	
CONTAMINAN		method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	13	10	6	
Sodium	ppm	ASTM D5185m		2	2	0	
Potassium	ppm	ASTM D5185m	>20	16	15	18	
INFRA-RED		method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	1.7	1.1	2.1	
Nitration	Abs/cm	*ASTM D7624	>20	13.6	11.2	16.7	
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.4	24.8	30.7	
FLUID DEGRA	OITAC	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.3	23.2	33.0	
Base Number (BN)	mg KOH/g	ASTM D2896		4.0	5.3	<u>^</u> 2.7	



# **OIL ANALYSIS REPORT**



`	VIOUAL		memou	IIIIIII basc	Garrent	riistory i	riistoryz
WI	hite Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Ye	ellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Pr	ecipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sil	•	scalar	*Visual	NONE	NONE	NONE	NONE
De	ebris	scalar	*Visual	NONE	NONE	NONE	NONE
Sa	and/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	pearance	scalar	*Visual	NORML	NORML	NORML	NORML
	dor	scalar	*Visual	NORML	NORML	NORML	NORML
	nulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	ee Water	scalar	*Visual	70.2	NEG	NEG	NEG
			Visuai		NEG	NLG	
F	FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
	sc @ 100°C	cSt	ASTM D445	12.00	11.9	11.4	11.9
	GRAPHS						
250 T	ron (ppm)				Lead (ppm)		
200 - 6	Severe	i			Severe	<u> </u>	
E 150 -					50		
150 - 100 - d	Abnormal			mdd	Abnormal		
50-		/			20+		
باه		$\stackrel{\smile}{\longrightarrow}$			٥		
Nor5 (7)	Jan 9/23	Jun5/23	Nov11/23 Jan17/24	Mar25/24	Dec5/22 Jan 9/23	Mar7/23 Jun5/23	Nov11/23 Jan17/24 Mar25/24
		η̈́	Nov	Mai			Nov Jan
50 T -	Aluminum (ppm)				Chromium ( <sub>1</sub>	ppm)	
	Severe	į	į į		Severe		
20							
	Abnormal			mdd	Abnormal		
10-					10+		
0					0		
Derf. 77	Jan 9/23 -	Jun5/23 -	Nov11/23 -	5/24	Dec5/22 - Jan 9/23 -	Mar7/23 - Jun5/23 -	1/23 -
٦٥	Jan Nar	Jun	Nov11/23 Jan17/24	Mar25/24	Dec	Mar	Nov11/23 Jan17/24 Mar25/24
	Copper (ppm)				Silicon (ppm	)	
400	Severe Abnormal				Severe Severe		
300 -					60 +		
틆 200 -				mdd	10		
100-					Abnormal		
70 110	- 52	/23	723	124	723	/23	724
Nev5/22	Jan9/23	Jun5/23	Nov11/23 Jan17/24	Mar25/24 .	Dec5/22	Mar7/23 Jun5/23	Nov11/23 - Jan17/24 - Mar25/24 -
١	/iscosity @ 100°	С		_	Base Numbe	er	_ , _ 2
16				<sub>@</sub> 10			
_14- d	Abnormal			Ko Ko	.0		
(3°C)112-	Base			, <u>E</u> 6	.0		^
żż .				quay 4	.0+		
10-	Abnormal			Base Number (mg KOH/g)	.0+		
Д 3	23 53 53		23	<b>─</b> 0	3 50.	- 53	23 +2
Darf (7.7	Jan 9/23	Jun5/23	Nov11/23 Jan17/24	Mar25/24	Dec5/22 Jan 9/23	Mar7/23 Jun5/23	Nov11/23 Jan17/24 Mar25/24
	, 2	,	ž	≥		_ ¬	z ~ Ž





Certificate 12367

Lab Number : 06143829

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **Sample No.** : PCA0121480

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received Unique Number : 10968637

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

: 10 Apr 2024 : 11 Apr 2024

: 12 Apr 2024 - Angela Borella

PHILADELPHIA, PA US 19116 Contact: ROSTY VITER rviter@millertransgroup.com

**MILLER TRUCK LEASING #118** 

2196 BENNETT ROAD

\* - 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)

Contact/Location: ROSTY VITER - MILPHINE

T: (215)552-9832

F: (215)552-9892