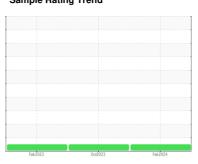


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



Machine Id **638628** 

Component **Diesel Engine** 

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

## DIAGNOSIS

### Recommendation

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

#### Wear

Metal levels are typical for a new component breaking in.

## Contamination

There is no indication of any contamination in the

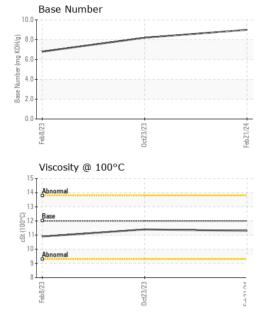
## **Fluid Condition**

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

AL)		Fel	2023	Oct2023 Feb203	24	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110627	PCA0097372	PCA0083855
Sample Date		Client Info		21 Feb 2024	23 Oct 2023	08 Feb 2023
Machine Age	mls	Client Info		62258	60854	52437
Oil Age	mls	Client Info		9821	8417	52437
Oil Changed		Client Info		Not Changd	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	13	32	71
Chromium	ppm	ASTM D5185m	>20	<1	2	5
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		3	14	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	4	18	70
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	14	63	194
Tin	ppm	ASTM D5185m	>15	0	2	4
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	8	20	24
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	59	49	47
Manganese	ppm	ASTM D5185m	0	<1	2	6
Magnesium	ppm	ASTM D5185m	950	1043	798	546
Calcium	ppm	ASTM D5185m	1050	1254	1341	1685
Phosphorus	ppm	ASTM D5185m	995	1135	923	749
Zinc	ppm	ASTM D5185m	1180	1370	1238	952
Sulfur	ppm	ASTM D5185m	2600	3607	2969	1999
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	6	10
Sodium	ppm	ASTM D5185m		1	3	7
Potassium	ppm	ASTM D5185m	>20	8	44	174
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.5	1.1
Nitration	Abs/cm	*ASTM D7624	>20	5.2	8.0	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	19.7	24.6
FLUID DEGRADATION method limit/base current history1 history2						
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	16.1	24.8
Base Number (BN)	mg KOH/g	ASTM D2896		9.0	8.2	6.8
. ,	- 0					



## **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
<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	11.3	11.4	10.9

GRAPHS				
Iron (ppm)		Lead (ppm	)	
250 Severe		Severe		
200		00		
150 100 Abnormal		Abnormal		
50	<u></u>	20		
0	4	0	2	95
Feb8/23	Feb21/24	Feb 8/23	0ct23/23	Feb21/24 -
Aluminum (ppm)	E	Chromium		Ľ.
80		Severe		
60		40		
E 40 Severe		Abnormal		
20 Abnormal		10		
0		0		-
Feb8/23	Feb21/24	Feb 8/23	0ct23/23	Feb21/24
Copper (ppm)	Œ.	Silicon (ppr		Ψ.
400 Severe Publicumal		80 Severe		
300		60		
E 200		E 40		
100		Abnormal 20		
0		0		
Feb8/23	Feb21/24	Feb8/23	0ct23/23	Feb21/24 -
Viscosity @ 100°C	뀰	Base Numb		Ť.
16 <sub>T</sub>		10.0	ei 	
14 Abnormal		8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00		
0-00112- Base	*******************************	E 6.0		
70 - Ahnormal		4.0		
Abnormal 8		0.0		
Feb8/23 + 0-ct23/23 +	Feb21/24	Feb8/23	0ct23/23 -	Feb21/24
Fet Oct2	Feb2	湿	0ct2	Feb2





Laboratory Sample No.

Lab Number : 06106952 Unique Number : 10910449

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0110627

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

Received : 04 Mar 2024 : 05 Mar 2024 Diagnosed

: 05 Mar 2024 - Wes Davis

**MILLER TRUCK LEASING #123** 66 KELLER AVENUE LANCASTER, PA US 17601

Contact: RON ROBERTS rroberts@millertransgroup.com T: (717)945-6205

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)

Contact/Location: RON ROBERTS - MILLAN

F: (717)945-5818