

# **OIL ANALYSIS REPORT**

#### Area (89671X) Walgreens Machine Id [Walgreens] 136A69092 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

# DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

#### Wear

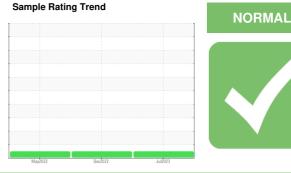
All component wear rates are normal.

#### 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.



SAMPLE INFORM	ΛΑΤΙΟΝ	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101031	PCA0087917	PCA0075507
Sample Date		Client Info		12 Jul 2023	21 Dec 2022	25 May 2022
Machine Age	mls	Client Info		683808	620491	555667
Oil Age	mls	Client Info		63317	64824	38733
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	51	44	22
Chromium	ppm	ASTM D5185m	>5	4	4	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	24	22	12
Lead	ppm	ASTM D5185m	>30	0	<1	<1
Copper	ppm	ASTM D5185m	>150	6	5	4
Tin	ppm	ASTM D5185m	>5	<1	<1	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	12	<1	6
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	66	66	61
Manganese	ppm	ASTM D5185m	0	1	<1	<1
Magnesium	ppm	ASTM D5185m	950	941	942	869
Calcium	ppm	ASTM D5185m	1050	1388	1236	1072
Phosphorus	ppm	ASTM D5185m	995	1102	1014	928
Zinc	ppm	ASTM D5185m	1180	1328	1292	1178
Sulfur	ppm	ASTM D5185m	2600	3289	2970	2717
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	8	8	5
Sodium	ppm	ASTM D5185m		24	1	2
Potassium	ppm	ASTM D5185m	>20	35	2	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.4	1.4	0.8
Nitration	Abs/cm	*ASTM D7624	>20	11.7	11.2	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	24.2	21.7
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2

20.5

5.2

Abs/.1mm \*ASTM D7414 >25

Base Number (BN) mg KOH/g ASTM D2896

Oxidation

17.2

6.6

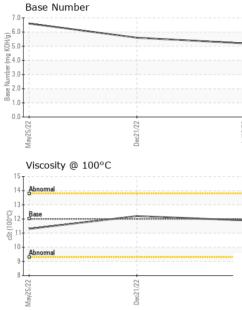
19.9

5.6

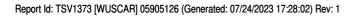


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VISUAL



Laboratory Sample No. Lab Number	: WearCheck USA - : PCA0101031 : 05905126	501 Madis Received Diagnose	: 24		3 Transervice	101 A	Anderson/Pendergras
	111 10 9 8 7 7 7 7 8 7 7 7 8 7 7 7 7 7 7 7 8 7	Dec21/22		ية 2.0 ص		Dec21/22	1112 2023
	15 14 <b>Abnormal</b> 13			6.0			
	May25/22 -	Dec21/22 -		Jul12/23	Dage Number		
	8- 6- 4-						
	10 copper	als		Jul12/23			
	Ferrous Alloys						
	GRAPHS	001		12.00	11.5	16.6	11.0
			method	limit/base	current	history1	history2 11.3
	Emulsified Water Free Water	scalar scalar	*Visual *Visual	>0.2	NEG NEG	NEG NEG	NEG NEG
Jull	Cuci	scalar	*Visual	NORML	NORML	NORML	NORML
2/23			*Visual		NORML	NORML	NONE NORML
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
							NONE
	Laboratory	Debris Sand/Dirt Appearance Odor Emulsified Water Free Water Fluid PROP Visc @ 100°C GRAPHS Ferrous Alloys Visc @ 100°C Odor Inicial Inicial Inici I	Yellow Metal scalar Precipitate scalar Sitt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar Free Water scalar Free Water scalar Free Water scalar Non-ferrous Alloys Visc @ 100°C cSt GRAPHS Ferrous Alloys Viscosity @ 100°C Viscosity @ 100°C	Yellow Metal scalar 'Visual Precipitate scalar 'Visual Silt scalar 'Visual Debris scalar 'Visual Appearance scalar 'Visual Emulsified Water scalar 'Visual Free Water scalar 'Visual Non-ferrous Alloys Visc @ 100°C cSt ASTM D445 GRAPHS Ferrous Alloys Viscosity @ 100°C Viscosity @ 100°C	Yellow Metal scalar *Visual NONE Precipitate scalar *Visual NONE Sitt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Sand/Dirt scalar *Visual NORML Odor scalar *Visual NORML Odor scalar *Visual NORML Odor scalar *Visual NORML Debris Sand/Dirt scalar *Visual NORML Odor scalar *Visual NORML Odor scalar *Visual NORML Debris Sand/Dirt scalar *Visual NORML Odor scalar *Visual NORML Enulsified Water scalar *Visual NORML Enulsified Water scalar *Visual NORML Visc @ 100°C cSt ASTM D445 12.00 CRAPHS Ferrous Alloys Visc @ 100°C Viscosity @ 100°C Viscosity @ 100°C Viscosity @ 100°C Of the scalar for the scala	Yellow Metal       scalar       Visual       NONE       NONE         Precipitate       scalar       Visual       NONE       NONE         Debris       scalar       Visual       NONE       NONE         Sand/Dirt       scalar       Visual       NONE       NONE         Appearance       scalar       Visual       NORML       NORML         Appearance       scalar       Visual       NORML       NORML         Odor       scalar       Visual       NORML       NORML         Debris       scalar       Visual       NORML       NORML         Appearance       scalar       Visual       NORML       NORML         Dor       scalar       Visual       NORML       NORML         Emulsified Water       scalar       Visual       NORML       NORML         Emulsified Water       scalar       Visual       NORML       NORML         Defr       scalar       Visual       NORM       NORML       NORML         Emulsified Water       scalar       Visual       NORM       NORML       NORML         None       none       model       model       netword       netword         None	<pre>Yellow Metal scalar 'Visual NONE NONE NONE NONE Precipitate scalar 'Visual NONE NONE NONE NONE Siti scalar 'Visual NONE NONE NONE Debris scalar 'Visual NONE NONE NONE Appearance scalar 'Visual NORML NORML NORML NORML Odor scalar 'Visual NORML NORML NORML NORML NORME NORE Tere Water scalar 'Visual NORML NORML NORML NORME NORE Tere Water scalar 'Visual NORML NORML NORML NORME NORM Precipitate scalar 'Visual NORML NORML NORML NORME NORM Precipitate scalar 'Visual NORML NORML NORML NORME NORM NORME NORME NORME NORM NORME NORM NORM NORME NORM NORM NORM NORM NORM NORM NORM NORM</pre>



Submitted By: Sonny Boucher

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