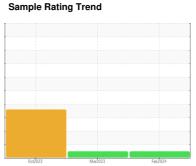


OIL ANALYSIS REPORT



NORMAL



Machine Id **62**Component **Diesel Engine**

PETRO CANADA DURON HP 15W40 (--- GAL)

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.

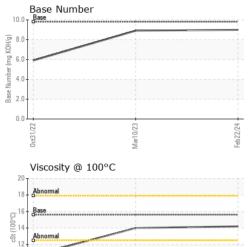
Fluid Condition

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

AL)		Oct	2022	Mar2023 Feb20	124	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0867936	WC0740580	WC0740563
Sample Date		Client Info		22 Feb 2024	10 Mar 2023	31 Oct 2022
Machine Age	mls	Client Info		0	0	0
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	△ 3.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	6	12	<u> </u>
Chromium	ppm	ASTM D5185m	>20	<1	<1	4
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	7	80
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	45	81
Tin	ppm	ASTM D5185m	>15	0	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		8	36	26
Barium	ppm	ASTM D5185m		0	0	6
Molybdenum	ppm	ASTM D5185m		56	57	51
Manganese	ppm	ASTM D5185m		<1	<1	6
Magnesium	ppm	ASTM D5185m		884	569	703
Calcium	ppm	ASTM D5185m		1196	1530	1303
Phosphorus	ppm	ASTM D5185m		979	877	703
Zinc	ppm	ASTM D5185m		1206	1105	905
Sulfur	ppm	ASTM D5185m		3264	3400	2805
CONTAMINANTS	;	method	limit/base		history1	history2
Silicon	ppm	ASTM D5185m	>25	4	4	△ 38
Sodium	ppm	ASTM D5185m		2	2	7
Potassium	ppm	ASTM D5185m	>20	4	15	257
INFRA-RED		method	limit/base		history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	5.2	5.8	14.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	17.6	25.4
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.1	13.1	25.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.0	8.9	5.9



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
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	14.2	14.0	△ 10.7

visc @ 100°C	CSI	ASTIVI D443	15.6	14.2	14.0	10.7
GRAPHS						
Iron (ppm)				Lead (ppm)		
250 Severe				Severe	1	
150				00		
100 Abnormal			-	Abnormal		-
50				20		
0 1 2 L	- 52/		124	0 122	/23	724
0et31/22	Mar10/23		Feb22/24	0ct31/22	Mar10/23	Feb22/24
Aluminum (ppm	1)			Chromium ((ppm)	
80				Severe		
Severe				Abnormal		-
20 - Abnormal				10		
0 122			724	0 727	723	724
0ct31/22	Mar10/23		Feb22/24	0ct31/22	Mar10/23	Feb22/24
Copper (ppm)				Silicon (ppm	1)	
400 T Severe				80 - Severe		
300				60+		
E 200 -				Abnormal		1
100				20		
0 22			45	0 127	723	724
0ct31/22	Mar10/23		Feb22/24	0ct31/22	Mar10/23	Feb22/24
Viscosity @ 100	°C			Base Numbe	er	
20 Abnormal						
© 16 - Base				8.00		
© 16 - Base 00 14 - Abnormal				4.0		
10				2.0		
8 	1/23		124	0.0		724
0ct31/22	Mar10/23		Feb22/24	0ct31/22	Mar10/23	Feb22/24





Laboratory

Sample No.

Lab Number : 06098964 Unique Number : 10897194

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0867936

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

: 23 Feb 2024 : 26 Feb 2024 : 26 Feb 2024 - Wes Davis

89 BOGGAN CUT RD WADESBORO, NC US 28135

Contact: MATT POWELL powell.berkeley@anson.k12.nc.us

ANSON CO SCHOOL BUS GARAGE

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)

T:

F: