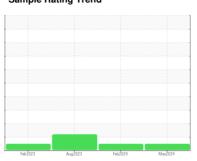


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
473
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.

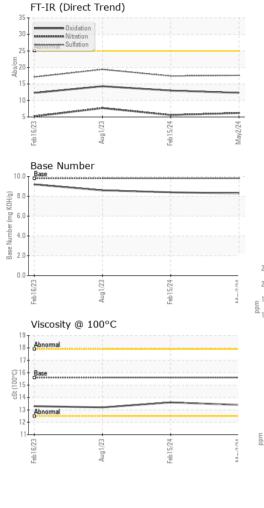
Fluid Condition

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

L)		Feb 202	3 Aug2023	Feb 2024 M	ay2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0905870	WC0906240	WC0792820
Sample Date		Client Info		02 May 2024	15 Feb 2024	01 Aug 2023
Machine Age	mls	Client Info		219938	215046	204398
Oil Age	mls	Client Info		5000	0	5000
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
-uel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	8	5	50
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m		2	<1	8
_ead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m		1	<1	3
Γin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		8	7	9
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		49	56	75
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		686	869	968
Calcium	ppm	ASTM D5185m		1366	1122	1282
Phosphorus	ppm	ASTM D5185m		1043	964	1036
Zinc	ppm	ASTM D5185m		1219	1179	1351
Sulfur	ppm	ASTM D5185m		3476	2980	3676
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	2	4
Sodium	ppm	ASTM D5185m		4	2	30
Potassium	ppm	ASTM D5185m	>20	7	0	<u> </u>
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.8
Vitration	Abs/cm	*ASTM D7624	>20	6.2	5.6	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	17.4	19.4
FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.3	13.0	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.3	8.4	8.6



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	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	13.4	13.6	13.2
GRAPHS						
Iron (ppm)			10	Lead (ppm)		
Severe		-		Severe		
				0		
Abnormal			Ed 4	0 Abnormal		
50			2	0		
0 8	-	4		0		+ +
eb 16/23 -		Feb15/24	May2/24	Feb 16/23	Aug1/23	May2/24
-		æ.	≥			≥
Aluminum (ppm)			5	Chromium (p	pm) 	
40 Severe			4	Severe		
E 30			Ed 3	0		
E 20 Abnormal	****************		82	0 Abnormal		
10				0		
33 0		- 4-2		0 1	- 3	- 54
Feb 16/23 - Aug 1/23 -		Feb15/24	May2/24	Feb 16/23	Aug1/23	May2/24
-		T.	<			<u> </u>
Copper (ppm) 400 Severe			8	Silicon (ppm)		,
300				0+	- i	
E 200			E.4	<u> </u>		
				Abnormal		
100			2	0		
23		24		0 23	23+	24
Feb16/23 -		Feb 15/24	May2/24	Feb16/23	Aug1/23	May2/24
Viscosity @ 100°C				Base Number	r	
Abnormal			10. F			
			8 8 6. 4. 2. 2. 8. 8. 8. 8. 8. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9.			
00 16 - Base			<u></u> <u></u> <u></u> 6.	i i		
Abnormal			W as 2	i i		
10				1:		
Feb16/23 -		Feb15/24 -	May2/24	Feb16/23-	Aug1/23	May2/24 -
Feb1		Feb.1	May	Feb 1	Aug	May





Certificate 12367

Laboratory

Sample No. : WC0905870 Lab Number : 06178560 Unique Number : 11029886

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 14 May 2024

Tested : 15 May 2024 : 15 May 2024 - Wes Davis Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

1603 SALEM CHURCH RD GOLDSBORO, NC

WAYNE CO SCHOOL BUS GARAGE

US 27530 Contact: BRANDON BRIGGS brandonbriggs@wcps.org

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: WAYGOL [WUSCAR] 06178560 (Generated: 05/15/2024 20:39:07) Rev: 1

Contact/Location: BRANDON BRIGGS - WAYGOL

T:

F: