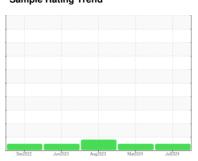


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 138

Diesel Engine

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

Recommendation

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

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

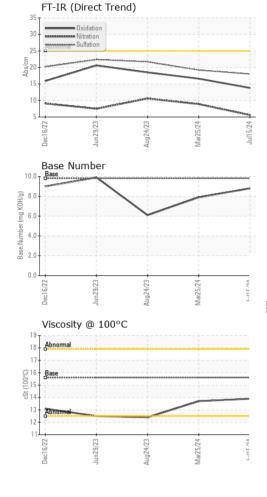
Fluid Condition

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

AL)		Dec2022	Jun2023	Aug2023 Mar2024	Jul2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0905954	WC0905937	WC0792730
Sample Date		Client Info		15 Jul 2024	25 Mar 2024	24 Aug 2023
Machine Age	mls	Client Info		94424	57112	70570
Oil Age	mls	Client Info		0	5000	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				NORMAL	NORMAL	MARGINAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	△ 3.0
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	21	32
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	8	8
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	<1	2
Tin	ppm	ASTM D5185m	>15	0	0	<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		6	5	8
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		55	56	65
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		881	917	681
Calcium	ppm	ASTM D5185m		1060	1075	1241
Phosphorus	ppm	ASTM D5185m		962	883	904
Zinc	ppm	ASTM D5185m		1160	1189	1127
Sulfur	ppm	ASTM D5185m		2879	3281	3015
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	4	5
Sodium	ppm	ASTM D5185m		2	<1	1
Potassium	ppm	ASTM D5185m	>20	2	4	8
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	5.6	8.9	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	19.2	21.7
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	16.6	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.8	7.9	6.1
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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 PROPE	ERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.6	13.9	13.7	12.4	
GRAPHS							
Iron (ppm)			100	Lead (ppm)			
Severe				Covere			
E 150			60				
150 100 Abnormal		-	E 40	Abnormal	 	····	-
50			20	1			
3 5		4	0			4	+
Dec16/22 Jun29/23	Aug24/23	Mar25/24	Jul15/24	Dec16/22 Jun29/23	4ug24/23	Mar25/24	7ul15/24
		Ž	7	_		Ĭ.	5
Aluminum (ppr	m) 		50	Chromium (pp	om) 		
40 - Severe	-		40	Covere			
= 30			30				
Abnormal 20			E 20	Abnormal	 	····	-
10-			10	+			
3 5		4				-	-
Dec16/22 Jun29/23	4ug24/23	Mar25/24	Jul15/24	Dec16/22 Jun29/23	4ug24/23	Mar25/24	Jull 5/24
	Au	Ž	7		Au	ž -	5
Copper (ppm)			80	Silicon (ppm)			
Abiroimal 300		***************************************	60				
E 200			E 40	Abnormal			
100			20				-
0 2 5		4				4	1
Dec16/22 Jun29/23	Aug24/23	Mar25/24	Jul15/24	Dec16/22 Jun29/23	Aug24/23	Mar25/24	Jul15/24
		Ξ	¬		Au	Σ	7
Viscosity @ 10	U-C			Base Number			
18 - Abnormal			8.0 8.0 6.0 6.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9				
0 16 - Base							
S 16 Base Absormal			4.0	+			
Abnormal			9g 2.0	+			
10 2	m	4	─ 0.0		m	**	+
Dec16/22 Jun29/23	Aug24/23	Mar25/24	Jul15/24	Dec16/22 Jun29/23	Aug24/23	Mar25/24	Jull 5/24
De	Au	Ĕ	Ť	Jul	Ani	Š	ゔ





Certificate 12367

Laboratory Sample No.

: WC0905954 Lab Number : 06241257

Unique Number : 11130091

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested**

: 18 Jul 2024 : 19 Jul 2024 : 19 Jul 2024 - Wes Davis Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

GOLDSBORO, NC US 27530

Contact/Location: BRANDON BRIGGS - WAYGOL

WAYNE CO SCHOOL BUS GARAGE

Contact: BRANDON BRIGGS brandonbriggs@wcps.org

1603 SALEM CHURCH RD

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)

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