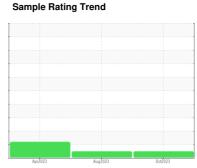


OIL ANALYSIS REPORT

DT



NORMAL



Machine Id 9771 Component Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

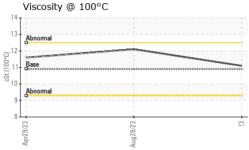
Fluid Condition

The condition of the oil is acceptable for the time in service.

				Aug2023 Oct20		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0853498	WC0853316	WC0796374
Sample Date		Client Info		21 Oct 2023	28 Aug 2023	29 Apr 2023
Machine Age	kms	Client Info		40858	37496	21656
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	8.0	△ 3.1
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	65	7	108
Chromium	ppm	ASTM D5185(m)	>20	2	0	3
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	22	2	12
Lead	ppm	ASTM D5185(m)	>40	7	0	6
Copper	ppm	ASTM D5185(m)	>330	27	<1	4
Tin	ppm	ASTM D5185(m)	>15	4	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	<1
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	30	110	30
Barium	ppm	ASTM D5185(m)	10	5	0	0
Molybdenum	ppm	ASTM D5185(m)	100	59	19	16
Manganese	ppm	ASTM D5185(m)		5	<1	1
Magnesium	ppm	ASTM D5185(m)	450	451	659	759
Calcium	ppm	ASTM D5185(m)	3000	1625	1346	1507
Phosphorus	ppm	ASTM D5185(m)	1150	917	727	792
Zinc	ppm	ASTM D5185(m)	1350	1115	781	822
Sulfur	ppm	ASTM D5185(m)	4250	2293	2478	2524
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	36	6	8
Sodium	ppm	ASTM D5185(m)		4	2	5
Potassium	ppm	ASTM D5185(m)	>20	74	3	10
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.2	0	0.9
Nitration	Abs/cm	ASTM D7624*	>20	10.2	6.4	14.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.7	19.5	29.1
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.0	12.3	26.1



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.1	12.1	▲ 11.6
GRAPHS						
Iron (nnm)				Lead (nnm)		

Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.1	12.1	<u> </u>
GRAPHS						
Iron (ppm)				Lead (ppm)		
250				90 Severe		
200 Severe				70		
150-				60 = 50		
E 100 - Abnormal				Abnormal		
50			-	20		
				10-		
0 1/23	8/23		0ct21/23 -	9/23 +	8/23	Oct21/23 -
Apr29/23	Aug28/23		Oct2	Apr29/23	Aug28/23	0ct2
Aluminum (ppm	1)			Chromium ((ppm)	
45 40 Severe				45 Severe		
30				30 +		
= 25				= 25		
Abnormal				20 - Abnormal		
10				10		
5	~/			5		
Apr29/23	Aug28/23		Oct21/23	Apr29/23	Aug28/23	Oct21/23
	Aug		Oct			004
Copper (ppm)				Silicon (ppm	1)	
350 - Abnormal				70		
250				50		
E 200				E 40		
150				Abnormal		
50				10+		
0	3			0	3	2
Apr29/23	Aug28/23		0ct21/23	Apr29/23	Aug28/23	0ct21/23
Viscosity @ 100			0	Soot %	A	0
14				8.0 Severe		
13 Abnormal				7.0 Abnormal		
212				5.0		
12 (5-00) 11 Base		*****************		54.0 S		
Abnormal				2.0		
9 +				1.0		
8 1,53	/23		73	0.0	723	23
Apr29/23	Aug28/23		Oct21/23	Apr29/23	Aug28/23	Oct21/23



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5668695 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0853498 : 02591616

Received : 25 Oct 2023 Diagnosed : 25 Oct 2023

Diagnostician : Wes Davis

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Rush Truck Centres 7450 Torbram Rd. Mississauga, ON CA L4T 1G9 Contact: Serdar Okur sokur@rushtruckcentres.ca T: (905)671-7600

Report Id: RUSMIS [WCAMIS] 02591616 (Generated: 10/25/2023 12:19:22) Rev: 1

Contact/Location: Serdar Okur - RUSMIS