

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id
2230
Component

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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

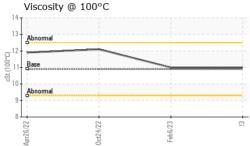
Fluid Condition

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

		Apr202	2 Oct2022	Feb 2023 M	ay2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0796285	WC0737624	WC0702946
Sample Date		Client Info		25 May 2023	06 Feb 2023	24 Oct 2022
Machine Age	kms	Client Info		334685	283566	233577
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	1	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	10	10	11
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	4	3	4
Lead	ppm	ASTM D5185(m)	>40	2	2	4
Copper	ppm	ASTM D5185(m)	>330	<1	<1	2
Tin	ppm	ASTM D5185(m)	>15	<1	1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
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	5	13	139
Barium	ppm	ASTM D5185(m)	10	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	100	61	64	98
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	947	972	697
Calcium	ppm	ASTM D5185(m)	3000	1065	1160	1468
Phosphorus	ppm	ASTM D5185(m)	1150	978	1072	773
Zinc	ppm	ASTM D5185(m)	1350	1192	1185	835
Sulfur	ppm	ASTM D5185(m)	4250	2456	2598	2230
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4	4	7
Sodium	ppm	ASTM D5185(m)		2	2	2
Potassium	ppm	ASTM D5185(m)	>20	12	6	7
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	8.0	7.7	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	21.3	23.1
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7	16.5	18.5



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VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IEO					
FLUID PHOPEN I	IES	method				history2
Visc @ 100°C	cSt	ASTM D7279(m)	limit/base 10.9	current 11.0	11.0	history2 12.1

	visc @ 100°C	CSI	ASTIVI D7279(III)	10.9	11.0	11.0	12.1	
- [GRAPHS							
_	Iron (ppm)				Lead (ppm)			
25					90 Severe			
20	Severe	***************************************			70 -			
_ 15	0				60 +			
E 10	Abnormal				Abnormal			
5					20			
					10			
	Apr26/22 +		Feb 6/23 -	5/23	0 223	0ct24/22 -	Feb 6/23 -	5/23
	Apr26/22		Feb	May25/23	Apr26/22	0ct2	Feb	May25/23
4	Aluminum (ppm)				Chromium (ppm)		
4	C				40 Severe			
3					30 +			
шd 2					25 - Abnormal			
- 2 1					20 Abromai		1	
1					10-			
					0			
	Apr26/22		Feb6/23	May25/23	Apr26/22	Oct24/22	Feb6/23	May25/23
			Œ.	Ma			Œ.	Mar
40	Copper (ppm)				Silicon (ppm	1)		
35	0				70-			
30 25	i i				50 +			
L 20)				E 40			
15 10					Abnormal 20			
5	1				10			
	22 22			- 3	0 22	- 22	23	- 53
	Apr26/22		Feb6/23 -	May25/23	Apr26/22	Oct24/22	Feb 6/23 -	May25/23
	Viscosity @ 100°0			2	Soot %			2
1					8.0 Severe			
1	Abnormal				7.0 Abnormal			
00	2				5.0+			
cSt (100°C)	Lase	************		*********	54.0 3.0			
	Abnormal				2.0			
	1				1.0			
	1727		9/23	1/23	0.0	1/22 -	9/23	123
	Apr26/22		Feb6/23 -	1ay25/23	4pr26/22	Oct24/22	Feb6/23 -	/lay25/23



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5656146 Test Package : MOB 1

: WC0796285 : 02587080

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 05 Oct 2023 Diagnosed : 05 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.

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