

OIL ANALYSIS REPORT

Area [6573]

Component **Diesel Engine**

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

Sample Rating Trend



Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0846154	WC0790228	
Sample Date		Client Info		11 Dec 2023	19 Sep 2023	
Machine Age	kms	Client Info		83117	74246	
Oil Age	kms	Client Info		0	0	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	1	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>65	6	12	
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	
Nickel	ppm	ASTM D5185(m)	>3	<1	<1	
Titanium	ppm	ASTM D5185(m)	>5	0	<1	
Silver	ppm	ASTM D5185(m)	>2	<1	<1	
Aluminum	ppm	ASTM D5185(m)	>35	2	4	
Lead	ppm	ASTM D5185(m)	>10	<1	<1	
Copper	ppm	ASTM D5185(m)	>180	6	22	
Tin	ppm	ASTM D5185(m)	>8	0	2	
Antimony	ppm	ASTM D5185(m)	>35	0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	90	25	
Barium	ppm	ASTM D5185(m)	10	<1	0	
Molybdenum	ppm	ASTM D5185(m)	100	11	11	
Manganese	ppm	ASTM D5185(m)		0	<1	
Magnesium	ppm	ASTM D5185(m)	450	683	769	
Calcium	ppm	ASTM D5185(m)	3000	1425	1298	
Phosphorus	ppm	ASTM D5185(m)	1150	722	761	
Zinc	ppm	ASTM D5185(m)	1350	812	845	
Sulfur	ppm	ASTM D5185(m)	4250	2537	2412	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	4	5	
Sodium	ppm	ASTM D5185(m)		3	3	
Potassium	ppm	ASTM D5185(m)	>20	4	0	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0.1	
Nitration	Abs/cm	ASTM D7624*	>20	8.3	9.3	
Cultation	A la a / 4 ma	ACTM D744 C+	0.0	400	01.0	

Sulfation

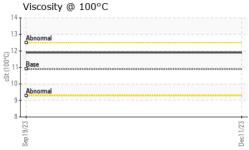
Abs/.1mm ASTM D7415* >30

21.9

18.8



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٧	′isc @ 100°C	cSt	ASTM D7279(m)	10.9	11.9	11.9		
	GRAPHS							
160	Iron (ppm)				Lead (ppm)			
140 -	Severe				Severe			
120 - 100 -					20			
ᇤ 80.	Abnormal				톱 15			
60 - 40 -					10 Abnormal			-
20-	-				5			
0.1	Sep 19/23 +			Dec11/23	Sep19/23			Decl1/23
				Decl				Dec
70-	Aluminum (ppm)				Chromium (ppm)		
60-	Severe				Severe			-
50-	-				8			
E 40	Abnormal				Abnormal			-
20-					4			
10-					2			
	Sep 19/23			Dec11/23	Sep19/23			Dec11/23
				De			1	De
400	Copper (ppm)				Silicon (ppm	·) 		
350 - 300 -	0				35			
250 - E 200					25			
툽 200 - 150 -	Abnormal				Abnormal Abnormal			
100 - 50 -					5			
0 -				- 53	0			13 + 2
	Sep 19/23			Dec11/23	Sep19/23			Dec11/23
	Viscosity @ 100°C				Soot %			
14-					5.0 Severe			
	Abnormal				4.0			
(100 ₋₀₂) 11: 10:	Base				53.0 Abnormal			-
[₹] 310•	Abnormal				2.0			
9 -					1.0			
81	Sep 19/23 -			Dec11/23 +	0.0 Sep 19/23	_	_	Dec11/23
	Sept			Deci	Sep1			Dec



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5697074 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0846154 : 02603989

Recieved Diagnosed

: 19 Dec 2023 : 19 Dec 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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