

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 9453

Component **Diesel Engine** Elui

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

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.

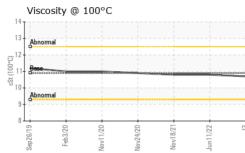
Fluid Condition

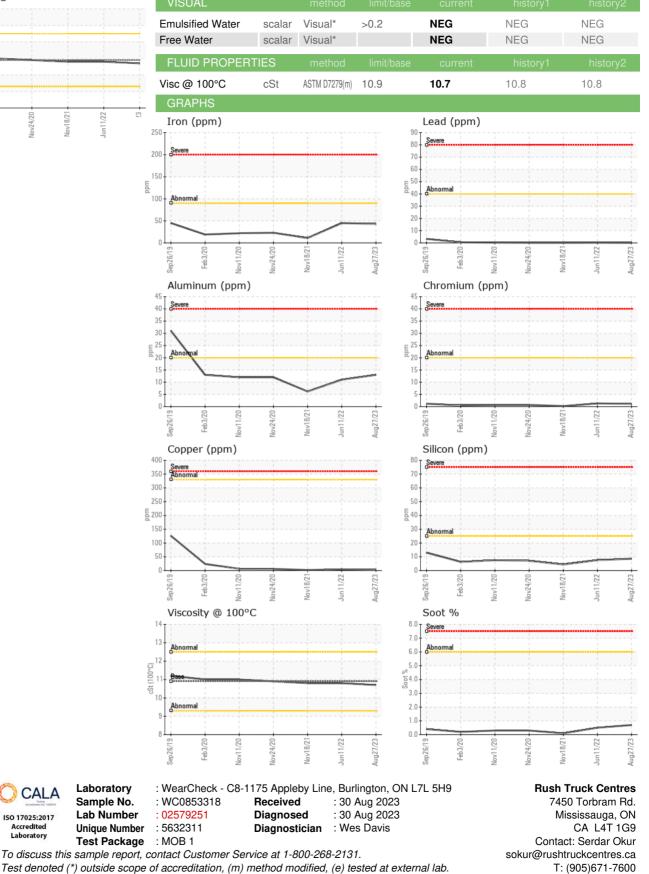
The condition of the oil is acceptable for the time in service.

		Sep2019	Feb2020 Nov2020	Nov2020 Nov2021 Jun2022	Aug2023	
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0853318	WC0703055	WC0624985
Sample Date		Client Info		27 Aug 2023	11 Jun 2022	18 Nov 2021
Machine Age	kms	Client Info		182246	147627	128372
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION		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	43	45	11
Chromium	ppm	ASTM D5185(m)		1	1	<1
Nickel	ppm	ASTM D5185(m)	>2	، <1	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)		13	11	6
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)		3	4	2
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Antimony	ppm	ASTM D5185(m)	210	0	0	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	ppm		limit/base			history2
		method			history1	
Boron	ppm	ASTM D5185(m)	250	30	29	53
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	10	4	4
Manganese	ppm	ASTM D5185(m)	450	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	664	704	696
Calcium	ppm	ASTM D5185(m)	3000	1336	1317	1302
Phosphorus	ppm	ASTM D5185(m)	1150	702	664	703
Zinc	ppm	ASTM D5185(m)	1350	784	762	767
Sulfur	ppm	ASTM D5185(m)	4250	2457	2479	2427
Lithium	ppm	ASTM D5185(m)	11	<1	<1	<1
CONTAMINANTS		method	limit/base		history1	history2
Silicon	ppm	ASTM D5185(m)	>25	9	8	4
Sodium	ppm	ASTM D5185(m)		3	4	2
Potassium	ppm	ASTM D5185(m)	>20	20	17	12
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.7	0.5	0.1
Nitration	Abs/cm	ASTM D7624*	>20	12.5	12.3	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.6	27.2	20.8
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.9	21.4	15.7
::11:10) Rev: 1				Contact/L	ocation: Serdar	Okur - RUSMIS
Nitration Sulfation FLUID DEGRADA Oxidation	Abs/cm Abs/.1mm	ASTM D7624* ASTM D7415* method	>20 >30 limit/base	12.5 25.6 current 20.9	12.3 27.2 history1 21.4	9.8 20.8 histo 15.7



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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.

CALA

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Page 2 of 2