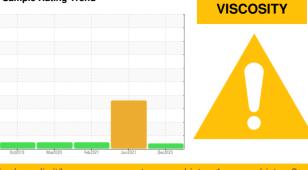


OIL ANALYSIS REPORT

Sample Rating Trend



Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Area [7503]

9566 Component

A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

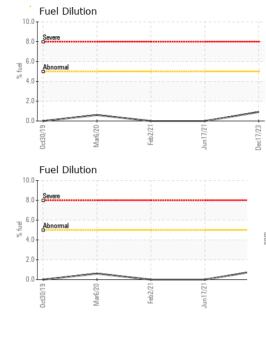
Fluid Condition

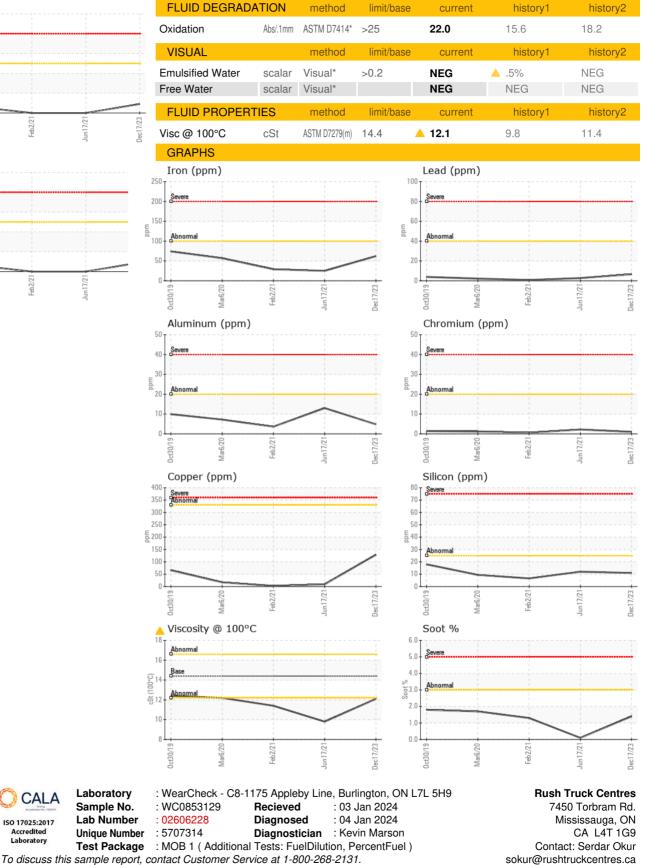
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0853129	WC0581048	WC0502764
Sample Date		Client Info		17 Dec 2023	17 Jun 2021	02 Feb 2021
Machine Age	kms	Client Info		177045	106966	96946
Oil Age	kms	Client Info		0	0	16000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	▲ 0.018	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	62	25	29
Chromium	ppm	ASTM D5185(m)	>20	1	2	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	5	13	4
Lead	ppm	ASTM D5185(m)	>40	7	3	<1
Copper	ppm	ASTM D5185(m)	>330	129	9	3
Tin	ppm	ASTM D5185(m)	>15	2	2	<1
Antimony	ppm	ASTM D5185(m)		0	0	<1
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	23	15	46
Barium	ppm	ASTM D5185(m)	10	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	3	54	5
Manganese	ppm	ASTM D5185(m)		<1	2	<1
Magnesium	ppm	ASTM D5185(m)	450	762	848	722
Calcium	ppm	ASTM D5185(m)	3000	1424	1152	1388
Phosphorus	ppm	ASTM D5185(m)	1150	732	930	704
Zinc	ppm	ASTM D5185(m)	1350	823	1182	832
Sulfur	ppm	ASTM D5185(m)	4250	2622	2530	2712
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	11	12	7
Sodium	ppm	ASTM D5185(m)		5	6	5
Potassium	ppm	ASTM D5185(m)	>20	3	▲ 40	4
Fuel	%	ASTM D7593*	>5	0.9	<1.0	<1.0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	1.4	0.1	1.3
Nitration	Abs/cm	ASTM D7624*	>20	14.6	8.2	13.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.4	20.5	23.9



OIL ANALYSIS REPORT





Validity of results and interpretation are based on the sample and information as supplied. Report Id: RUSMIS [WCAMIS] 02606228 (Generated: 01/04/2024 09:40:29) Rev: 1

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Laboratory

Sample No.

Lab Number

CALA

ISO 17025:2017 Accredited

Laboratory

F:

T: (905)671-7600