

OIL ANALYSIS REPORT

NORMAL



FREIGHTLINER 001

Component

Diesel Engine

DIESEL ENGINE OIL SAE 30 (--- GAL)

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm.

Wear

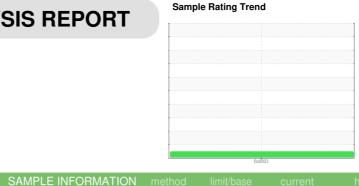
All component wear rates are normal.

Contamination

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

Fluid Condition

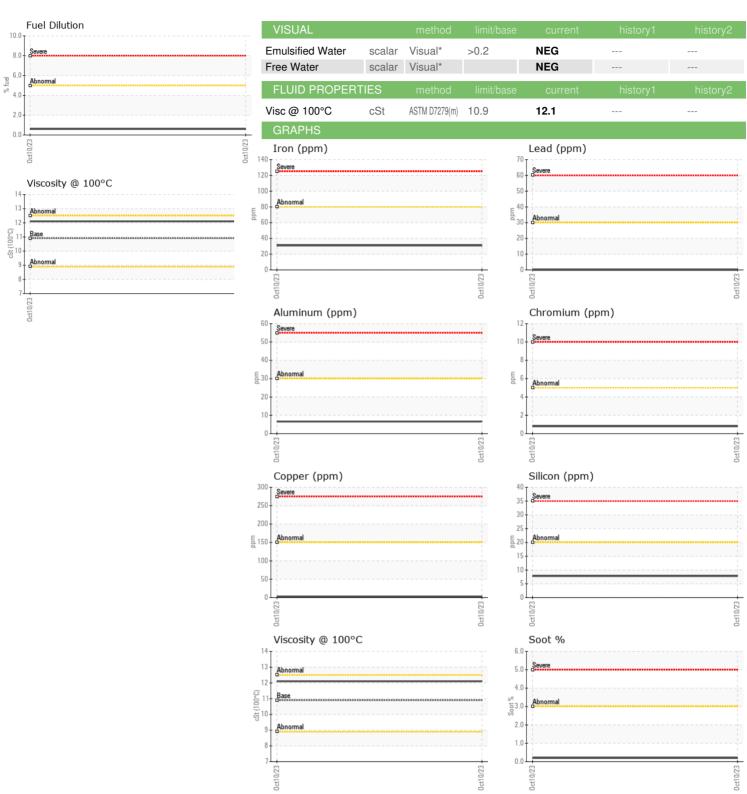
The condition of the oil is acceptable for the time in service.



SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PP0000672		
Sample Date		Client Info		10 Oct 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATIO	V	method	limit/base	current	history1	history2
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>80	31		
Chromium	ppm	ASTM D5185(m)	>5	<1		
Nickel	ppm	ASTM D5185(m)	>2	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	<1		
Aluminum	ppm	ASTM D5185(m)	>30	7		
Lead	ppm	ASTM D5185(m)	>30	0		
Copper	ppm	ASTM D5185(m)	>150	3		
Tin	ppm	ASTM D5185(m)	>5	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
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ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base 250	current 58	history1	history2
	ppm				•	,
Boron		ASTM D5185(m)	250	58		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	250 10	58 <1		
Boron Barium Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10	58 <1 82		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100	58 <1 82 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450	58 <1 82 0 82		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000	58 <1 82 0 82 2090		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150	58 <1 82 0 82 2090 1013		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150 1350	58 <1 82 0 82 2090 1013 1172		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150 1350	58 <1 82 0 82 2090 1013 1172 3062		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250	58 <1 82 0 82 2090 1013 1172 3062 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250	58 <1 82 0 82 2090 1013 1172 3062 <1 current		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250	58 <1 82 0 82 2090 1013 1172 3062 <1 current 8		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 limit/base >20 >75	58 <1 82 0 82 2090 1013 1172 3062 <1 current 8		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 limit/base >20 >75 >20	58 <1 82 0 82 2090 1013 1172 3062 <1 current 8 3 <1		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 limit/base >20 >75 >20 >5	58 <1 82 0 82 2090 1013 1172 3062 <1 current 8 3 <1 0.6		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 limit/base >20 >75 >20 >5	58 <1 82 0 82 2090 1013 1172 3062 <1 current 8 3 <1 0.6 current		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7593* method ASTM D7844*	250 10 100 450 3000 1150 1350 4250 limit/base >20 >75 >20 >5 limit/base >3	58 <1 82 0 82 2090 1013 1172 3062 <1 current 8 3 <1 0.6 current 0.2	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7593* method ASTM D7844* ASTM D7624* ASTM D7615*	250 10 100 450 3000 1150 1350 4250 limit/base >20 >75 >20 >5 limit/base >3 >20 >30	58 <1 82 0 82 2090 1013 1172 3062 <1 current 8 3 <1 0.6 current 0.2 8.8 19.3		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7593* method ASTM D7593*	250 10 100 450 3000 1150 1350 4250 limit/base >20 >75 >20 >5 limit/base >3 >20	58 <1 82 0 82 2090 1013 1172 3062 <1 current 8 3 <1 0.6 current 0.2 8.8	history1 history1	history2 history2



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number

: PP0000672 : 02588087

: 5657153

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 11 Oct 2023 Diagnosed

: 12 Oct 2023 Diagnostician : Wes Davis

Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel) 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.

12221691 CANADA INC

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