WEAR CONTAMINATION FLUID CONDITION

NORMAL SEVERE SEVERE

Machine Id

KIOTI WA0G00514

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the fuel injection system. We recommend	Sample Number		Client Info		KT0001031		
that you creek the identification system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		24 Jun 2024		
	Machine Age	hrs	Client Info		104		
	Oil Age	hrs	Client Info		54		
	Filter Age	hrs	Client Info		54		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
VEAR	Iron	ppm	ASTM D5185(m)	>100	2		
	Chromium	ppm	ASTM D5185(m)	>20	0		
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185(m)	>4	0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>20	2		
	Lead	ppm	ASTM D5185(m)	>40	<1		
	Copper	ppm	ASTM D5185(m)	>330	2		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	3		
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.	Potassium	ppm	ASTM D5185(m)		<1		
	Fuel	%	ASTM D7593*	>5	24.5		
	Water		WC Method	>0.2	NEG		
	Glycol	0/	WC Method	0	NEG		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*	>20	6.9		
	Sulfation	Abs/.1mm		>30	15.7		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar		NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
	Boron	ppm	ASTM D5185(m)		55		
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.	Barium	ppm	ASTM D5185(m)		<1		
	Molybdenum	ppm	ASTM D5185(m)		61		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		67		
	Calcium	ppm	ASTM D5185(m)		1634		
	Phosphorus	ppm	ASTM D5185(m)		735		
	Zinc	ppm	ASTM D5185(m)		837		
	Sulfur	ppm	ASTM D5185(m)		2438		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	10.4		
	Visc @ 40°C	cSt	ASTM D7279(m)		△ 39.0		
	Visc @ 100°C	cSt	ASTM D7279(m)		7.4		
	Viscosity Index (VI)	01-	AOTA DOOTO		150		

Viscosity Index (VI) Scale ASTM D2270*





CALA ISO 17025:2017 Accredited Laboratory

Sample No.

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : KT0001031 Lab Number : 02643946

Unique Number : 5801485

Received **Tested** Diagnosed

: 25 Jun 2024 : 26 Jun 2024

: 26 Jun 2024 - Wes Davis

ATLANTIC TRAILER & EQUIPMENT 8 LINTROSE PLACE MOUNT PEARL, NL CA A1N 5K2

Contact: Service Manager

Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual) 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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