WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



CATERPILLAR 2WS39326

Diesel Engine

KING OIL SAE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TIEGOMMENDATION	Sample Number	OOM	Client Info	Ellille / toll	LF0000498		
Resample at the next service interval to monitor.	Sample Date		Client Info		21 Feb 2024		
	Machine Age	mls	Client Info		0		
	Oil Age	mls	Client Info		12000		
	Filter Age	mls	Client Info		0		
	Oil Changed	0	Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR							
WEAR	Iron	ppm	ASTM D5185m		8		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		3		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	nnm	ASTM D5185m	× 25	6		
CONTAININATION	Potassium	ppm	ASTM D5185m		1		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	<i>></i> 0.2	NEG		
	Soot %	%	*ASTM D7844	- 2	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	6.7		
	Sulfation	Abs/.1mm	*ASTM D7415		40.8		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
The DN yearst indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		397		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		136		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		525		
	Calcium	ppm	ASTM D5185m		1489		
	Phosphorus	ppm	ASTM D5185m		905		
	Zinc	ppm	ASTM D5185m		1046		
	Sulfur	ppm	ASTM D5185m		2909		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	45.6		
	Base Number (BN)	0 0			8.5		
	Visc @ 100°C	cSt	ASTM D445	13.0	13.0		





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: LF0000498 Lab Number : 06099576 Unique Number: 10897806

Received **Tested** Diagnosed

: 27 Feb 2024 Test Package : MOB 1 (Additional Tests: TBN)

: 27 Feb 2024 - Sean Felton

: 26 Feb 2024

BIGWRENCH TRUCK REPAIR 2422 PAYNEVILLE RD BRANDENBURG, KY

US 40108 Contact: BOB AND ROBIN DINGUS

rrding@bbtel.com T: (270)422-5555

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (270)422-5558