

NORMAL WEAR CONTAMINATION NORMAL FLUID CONDITION **ATTENTION**

Machine Id CATERPILLAR SL8302 (S/N DY911079)

Component Diesel Engine

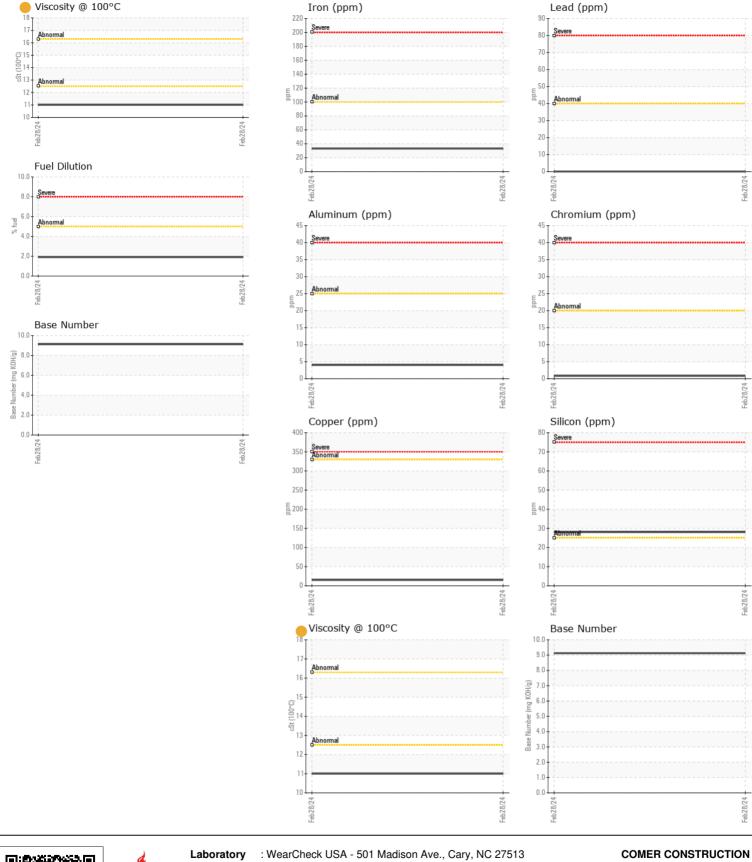
DURALENE Dura-Max Xtreme 15W40 (--- GAL)

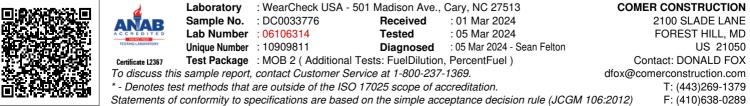
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: First sample)	Sample Number		Client Info		DC0033776		
	Sample Date		Client Info		28 Feb 2024		
	Machine Age	hrs	Client Info		260		
	Oil Age	hrs	Client Info		260		
	Filter Age	hrs	Client Info		260		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				ATTENTION		
WEAR	Iron	ppm	ASTM D5185m		33		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>20	<1		
	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m	>2	<1		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m	>25	4		
	Lead	ppm	ASTM D5185m	>40	0		
	Copper	ppm	ASTM D5185m	>330	15		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		28		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		3		
	Fuel	%	ASTM D3524		1.9		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	8.4		
	Sulfation	Abs/.1mm	*ASTM D7415		22.4		
	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	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	O e ell'e un						
	Sodium	ppm	ASTM D5185m		4		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		43		
	Barium	ppm	ASTM D5185m		2		
	Molybdenum	ppm	ASTM D5185m		49		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m		436		
	Calcium	ppm	ASTM D5185m		1838		
	Phosphorus	ppm	ASTM D5185m		981		
	Zinc	ppm	ASTM D5185m		1127		
	Sulfur	ppm	ASTM D5185m		3222		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7		
	Base Number (BN)	mg KOH/g	ASTM D2896		9.12		

Visc @ 100°C cSt

ASTM D445

11.0





Submitted By: DONALD FOX

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