



## Machine Id MACK GR64F XT2509 (S/N 1M2GR4GC2LM016155) Component Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		DC0031866		
Resample at the next service interval to monitor.	Sample Date		Client Info		04 Jun 2024		
	Machine Age	mls	Client Info		105710		
	Oil Age	mls	Client Info		105710		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	nnm	ASTM D5185m	<120	100		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m		5		
	Titanium	ppm ppm	ASTM D5185m		0		
	Silver		ASTM D5185m		۰ <1		
	Aluminum	ppm ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m		2		
	Copper	ppm	ASTM D5185m		16		
	Tin	ppm	ASTM D5185m		3		
	Vanadium	ppm	ASTM D5185m	210	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	13		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3		
	Fuel		WC Method	>3.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>4	2.4		
	Nitration	Abs/cm	*ASTM D7624	>20	14.4		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	29.2		
	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		
	Codium				Α		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron Barium	ppm	ASTM D5185m ASTM D5185m		17		
	Molybdenum	ppm	ASTM D5185m		0 57		
	Manganese	ppm	ASTM D5185m		2		
	-	ppm	ASTM D5185m		2 564		
	Magnesium Calcium	ppm ppm	ASTM D5185m		564 1704		
	Phosphorus	ppm	ASTM D5185m		936		
	Zinc	ppm	ASTM D5185m		1193		
	Sulfur	ppm	ASTM D5185m		2944		
	Oxidation	Abs/.1mm	*ASTM D5185111	>25	2944		
	Base Number (BN)	mg KOH/g	ASTM D7414 ASTM D2896	220	25.9 5.97		
	Visc @ 100°C	cSt	ASTM D2090 ASTM D445		13.7		
		001	AG I IVI D443		13.7		



