

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



Machine Id
MACK FL-40
Component
Diesel Engine
Fluid

GIBRALTAR 15W/40 SUPER S-3 LX (--- GAL)

Test U.M. Method Meth	GIDNALIAN 13W/40 SUPEN 3	J LX (GA	` /					
Resample at the next service interval to monitor.	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age hrs Client into 14733		Sample Number		Client Info		WC0875383		
Col Age	Resample at the next service interval to monitor.	Sample Date		Client Info		07 May 2024		
Filter Age hrs Client Info		Machine Age	hrs	Client Info		14733		
Oil Changed Cilient Info N/A N/A N/A N		Oil Age	hrs	Client Info		600		
Filter Changed Client Info MA MA MCRMAL MCRMA		Filter Age	hrs	Client Info		600		
Nome		Oil Changed		Client Info		N/A		
Iron		Filter Changed		Client Info		N/A		
All component wear rates are normal.		Sample Status				NORMAL		
All component wear rates are normal.	WEAD	Iron	nnm	ACTM DE10Em	. 120	40	[
All component wear rates are normal. Nicke								
Titanium ppm ASTM D6185m >2 0								
Silver ppm ASTM 05185m >20 2								
Aluminum ppm ASTM D5185m >20 2								
Lead ppm ASTM D5185m 340 <1								
Copper								
Tin								
Vanadium Vanadium								
White Metal Yellow Metal Scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON					>10			
Solition					NONE	-		
Silicon ppm ASTM D5185m >25 4								
Potassium ppm ASTM 05185m >20 <1				Visuai	NONL	·····		
Potassium ppm ASTM 05185m >20 <1	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4		
Water WC Method So.2 NEG		Potassium	ppm	ASTM D5185m	>20	<1		
Glycol	There is no indication of any contamination in the oil.	Fuel		WC Method	>3.0	<1.0		
Glycol		Water		WC Method	>0.2	NEG		
Soot %		Glycol		WC Method		NEG		
Sulfation Abs/.tmm *ASTM D7415 >30 21.0		Soot %	%	*ASTM D7844	>4	0.6		
Silt Scalar *Visual NONE NONE Debris Scalar *Visual NONE Sand/Dirt Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NORML		Nitration	Abs/cm	*ASTM D7624	>20	8.9		
Debris Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NONE NORML NOR		Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0		
Sand/Dirt Scalar *Visual NONE NONE Appearance Scalar *Visual NORML		Silt	scalar	*Visual	NONE	NONE		
Appearance		Debris	scalar	*Visual	NONE	NONE		
Oddr Scalar *Visual NORML NORML NORML Emulsified Water Scalar *Visual >0.2 NEG		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.2 NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium ppm ASTM D5185m 9		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 9 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 66 62 Manganese ppm ASTM D5185m 1000 900 Magnesium ppm ASTM D5185m 1000 900 Calcium ppm ASTM D5185m 1050 1138 Phosphorus ppm ASTM D5185m 1150 977 Sulfur ppm ASTM D5185m 1270 1245 Sulfur ppm ASTM D5185m 3137 Sulfur ppm ASTM D7414 >25 16.5 Base Number (BN) mg KOHg ASTM D2896 10.1 6.66		Emulsified Water	scalar	*Visual	>0.2	NEG		
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The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. Barium ppm ASTM D5185m 66 62 Molybdenum ppm ASTM D5185m 66 62 Magnese ppm ASTM D5185m 1000 900 Calcium ppm ASTM D5185m 1050 1138 Phosphorus ppm ASTM D5185m 1150 977 Zinc ppm ASTM D5185m 1270 1245 Sulfur ppm ASTM D5185m 3137 Oxidation Abs/.tmm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 10.1 6.66	FLUID CONDITION							
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Manganese ppm ASTM D5185m <1					66			
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Oxidation Abs/.1mm *ASTM D7414 >25 16.5 Base Number (BN) mg KOH/g ASTM D2896 10.1 6.6					12/0			
Base Number (BN) mg KOH/g ASTM D2896 10.1 6.6					- DE			
() 5								
VISC @ 100 C CSL		()	0 0					
		VISC @ 100 C	COL	MOTIVI D440	13.5	13.9		





Laboratory Sample No.

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

: WC0875383 Lab Number : 06188918 Unique Number : 11045670

Received **Tested** Diagnosed

: 24 May 2024 Test Package : MOB 1 (Additional Tests: TBN)

: 24 May 2024 - Wes Davis

: 23 May 2024

* - 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.

OAKRIDGE WASTE

307 WHITE ST DANBURY, CT US 06810

Contact: CHRIS CONTI

chris.conti@oakridgewaste.com T:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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