WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Machine Id

2031

Component
Diesel Engine

{not provided} (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		LP0001989		
	Sample Date		Client Info		20 Jun 2024		
	Machine Age	mls	Client Info		182666		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info	_	0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
VEAR	Iron	ppm	ASTM D5185m	>100	9		
VEAIL	Chromium		ASTM D5185m		<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	24	0		
	Silver	ppm	ASTM D5185m	. 2	0		
		ppm					
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		<1		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m	NIONIE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2		
	Fuel		WC Method	>5	<1.0		
	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	>30	19.0		
	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		
LUID CONDITION	Sodium	nnm	ASTM D5185m		9		
LOID GONDITION	Boron	ppm	ASTM D5185m		12		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium		ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		27		
	Manganese	ppm	ASTM D5185m		<1		
	-	ppm			29		
	Magnesium	ppm	ASTM D5185m		29 2346		
	Calcium	ppm	ASTM D5185m				
	Phosphorus	ppm	ASTM D5185m		914		
	Zinc	ppm	ASTM D5185m		1117		
	Sulfur	ppm	ASTM D5185m	05	4075		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	12.9		
	Base Number (BN)	ma 1/011/	ACTM DOOGS		5.88		





Laboratory Sample No.

Lab Number : 06215946

: LP0001989

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

Received **Tested**

: 20 Jun 2024

: 23 Jun 2024

: 23 Jun 2024 - Don Baldridge

Diagnosed Unique Number : 11088810 Test Package : MOB 2 (Additional Tests: TAN Man)

Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. S.M. LORUSSO & SONS

221 NORFOLK ST. WALPOLE, MA US 02081

Contact: PAUL BECKMAN pbeckman@smlorusso.com T: (508)668-2603

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (508)660-0232

Contact/Location: PAUL BECKMAN - SMLWALNC