WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id **3970**

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0663200	WC0390542	
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		08 Mar 2024	10 Feb 2020	
	Machine Age	mls	Client Info		368321	99535	
	Oil Age	mls	Client Info		38041	42722	
	Filter Age	mls	Client Info		38041	42722	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
VEAR	Iron	nnm	ASTM D5185m	>100	15	35	
VLAN	Chromium	ppm	ASTM D5185m		<1	<1	
All component wear rates are normal.	Nickel	ppm		>4	0	<1	
	Titanium	ppm ppm	ASTM D5185m	>4	<1	0	
	Silver	ppm	ASTM D5185m	~3	<1	<1	
	Aluminum	ppm	ASTM D5185m		8	13	
	Lead	ppm	ASTM D5185m		0	<1	
	Copper	ppm	ASTM D5185m		4	9	
	Tin	ppm	ASTM D5185m		1	1	
	Vanadium	ppm	ASTM D5185m	7.0	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m		7	5	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	12	38	
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844		0.5	0.7	
	Nitration	Abs/cm	*ASTM D7624	>20	11.6	11.3	
	Sulfation	Abs/.1mm	*ASTM D7415		24.5	25.4	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor Emulsified Water	scalar	*Visual	NORML	NORML	NORML	
		scalar	*Visual	>0.2	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m		4	4	
	Boron	ppm	ASTM D5185m		27	30	
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		1	0	
	Molybdenum	ppm	ASTM D5185m		22	8	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		664	743	
	Calcium	ppm	ASTM D5185m		1682	1495	
	Phosphorus	ppm	ASTM D5185m	1260	742	766	
	Zinc	ppm	ASTM D5185m	1400	929	841	
	Sulfur	ppm	ASTM D5185m		3000	3385	
	Oxidation	Abs/.1mm	*ASTM D7414		23.7	22.2	
	Base Number (BN)	mg KOH/g	ASTM D2896	10.1	5.2	5.7	
	Visc @ 100°C	cSt		11.1	12.2	12.5	







Certificate L2367

Laboratory

Sample No.

Lab Number : 06125374 Unique Number: 10939525

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0663200 Received : 21 Mar 2024 : 24 Mar 2024

Tested Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

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. LTI/MILKY WAY - SUNNYSIDE

333 MIDVALE RD SUNNYSIDE, WA US 98944

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

: 24 Mar 2024 - Wes Davis