WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**

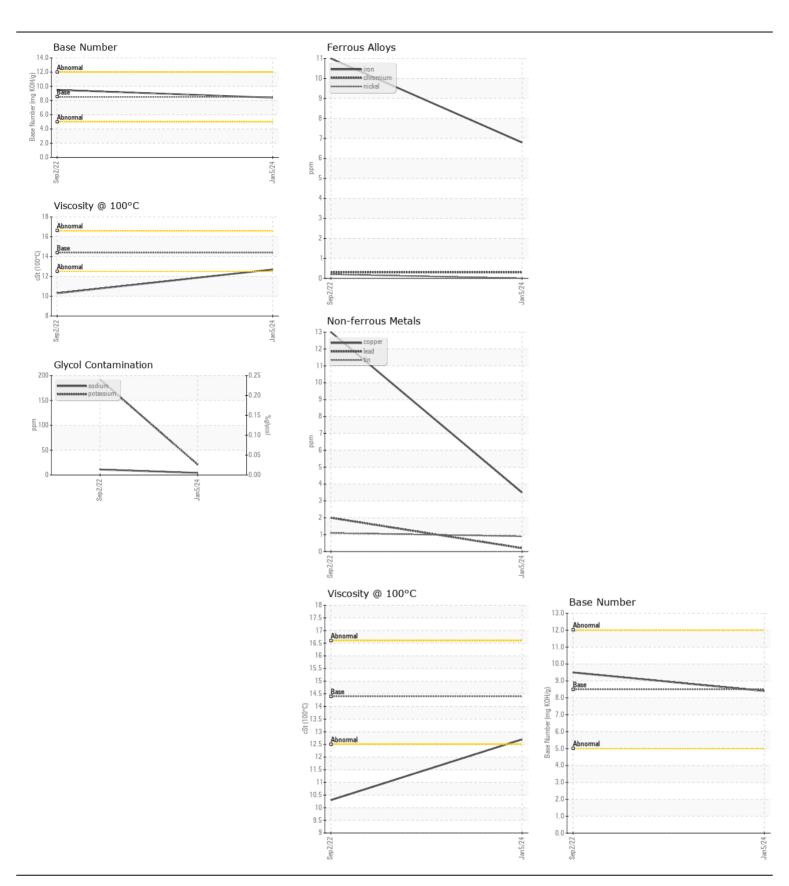
[W07014009-1]

TAKEUCHI TB240 124006792

Component Diesel Engine

DIESEL ENGINE OIL SAF 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. WEAR	Sample Number		Client Info		ML0000482	VCP377878	
	Sample Date		Client Info		05 Jan 2024	02 Sep 2022	
	Machine Age	hrs	Client Info		172	70	
	Oil Age	hrs	Client Info		172	70	
	Filter Age	hrs	Client Info		172	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
	Iron	ppm	ASTM D5185m	>100	7	11	
	Chromium	ppm	ASTM D5185m		, <1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	<1	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	<1	
	Aluminum	ppm	ASTM D5185m		2	2	
	Lead	ppm	ASTM D5185m		- <1	2	
	Copper	ppm	ASTM D5185m		4	13	
	Tin	ppm	ASTM D5185m	>15	<1	1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
ONTANINATION							
CONTAMINATION	Silicon	ppm	ASTM D5185m		16	39	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		21	▲ 192	
	Fuel		WC Method		<1.0	1.4	
	Water Glycol	0/	WC Method *ASTM D2982	>0.2	NEG NEG	NEG NEG	
	Soot %	%	*ASTM D7844	. 2	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	7.3	7.2	
	Sulfation	Abs/.1mm	*ASTM D7024		18.6	16.6	
	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	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.2	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m		4	11	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		66	269	
	Barium	ppm	ASTM D5185m		<1	7	
	Molybdenum	ppm	ASTM D5185m	100	78	163	
	Manganese	ppm	ASTM D5185m	450	<1	<1	
	Magnesium	ppm	ASTM D5185m		678	23	
	Calcium	ppm	ASTM D5185m		1267	1981	
	Phosphorus	ppm	ASTM D5185m		789	581	
	Zinc	ppm	ASTM D5185m	1350	862	711	
	Sulfur	ppm Abo/1mm	ASTM D5185m		2292	2188	
	Oxidation	Abs/.1mm	*ASTM D7414		16.3 8.4	11.9 9.5	
	Base Number (BN)	mg KOH/g	ASTM D2896	85			







Certificate L2367

Laboratory Sample No. Lab Number

: 06060543 Unique Number : 10831925

: ML0000482

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 16 Jan 2024 Diagnosed : 16 Jan 2024

Diagnostician : Don Baldridge

Test Package : CONST (Additional Tests: Glycol, 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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