

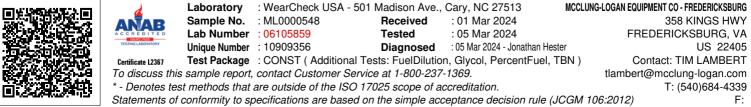
## Machine Id **TAKEUCHI TB240 124008566** Component **Diesel Engine** Fluid **VALVOLINE 15W40 (--- GAL)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		ML0000548		
	Sample Date		Client Info		28 Feb 2024		
	Machine Age	hrs	Client Info		44		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	7		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	~1	0		
	Silver		ASTM D5185m	. 2	0		
		ppm					
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m		2		
	Copper	ppm	ASTM D5185m		6		
	Tin	ppm	ASTM D5185m	>15	1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION Sodium and/or potassium levels are high. Fuel content negligible. Test for glycol is negative.	Silicon	ppm	ASTM D5185m	>25	36		
	Potassium	ppm	ASTM D5185m	>20	<b>A</b> 185		
	Fuel	%	ASTM D3524		1.2		
	Water		WC Method		NEG		
	Glycol	%	*ASTM D2982		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	5.8		
	Sulfation	Abs/.1mm	*ASTM D7415		15.9		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt				NONE		
		scalar	*Visual	NONE	NORML		
	Appearance Odor	scalar	*Visual	NORML			
	Emulsified Water	scalar scalar	*Visual *Visual	NORML >0.2	NORML NEG		
		oourur					
FLUID CONDITION	Sodium	ppm	ASTM D5185m		11		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		211		
	Barium	ppm	ASTM D5185m		5		
	Molybdenum	ppm	ASTM D5185m	49	156		
	Manganese	ppm	ASTM D5185m	1	<1		
	Magnesium	ppm	ASTM D5185m	616	16		
	Calcium	ppm	ASTM D5185m	1554	2019		
	Phosphorus	ppm	ASTM D5185m	899	616		
	Zinc	ppm	ASTM D5185m	1069	747		
	Sulfur	ppm	ASTM D5185m		2681		
	Oxidation	Abs/.1mm	*ASTM D7414		10.8		
	Base Number (BN)				7.6		
				10.0			

Visc @ 100°C cSt ASTM D445 13.6

10.2





Contact/Location: TIM LAMBERT - MCCFRE

Page 2 of 2