WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

[SWA530139]

## TAKEUCHI TW60 4000120E126656

Diesel Engine

**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)** 

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP437309		
	Sample Date		Client Info		17 Apr 2024		
	Machine Age	hrs	Client Info		357		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	21		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>20	<1		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	<1		
	Aluminum	ppm	ASTM D5185m	>20	8		
	Lead	ppm	ASTM D5185m	>40	1		
	Copper	ppm	ASTM D5185m	>330	24		
	Tin	ppm	ASTM D5185m	>15	1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	33		
30117AIIII17A11314	Potassium	ppm	ASTM D5185m		2		
There is no indication of any contamination in the oil.	Fuel	pp	WC Method		- <1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	7.9		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		9		
Loid Condition	Boron	ppm	ASTM D5185m	2.5	92		
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		0		
	Molybdenum	ppm	ASTM D5185m		65		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		325		
	Calcium	ppm	ASTM D5185m		1900		
	Phosphorus	ppm	ASTM D5185m		1040		
	Zinc	ppm	ASTM D5185m		1199		
	Sulfur	ppm	ASTM D5185m		3963		
	Oxidation	Abs/.1mm	*ASTM D7414		16.4		
	Base Number (BN)				7.9		
	Visc @ 100°C	cSt	ASTM D445		12.7		





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VCP437309

Lab Number : 06154038 Unique Number : 10989461 Test Package : MOB 1 ( Additional Tests: TBN )

Received **Tested** 

: 19 Apr 2024 : 22 Apr 2024 Diagnosed

: 22 Apr 2024 - Wes Davis

**ALTA EQUIPMENT COMPANY** 5151 DR MARTIN LUTHER KING BLVD

FORT MYERS, FL US 33905 Contact: TODD LARK

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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)