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

## [701908 MOSAIC]

## **TAKEUCHI TB2150 514601123**

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		VCP437945	VCP408277	
	Sample Date		Client Info		17 Apr 2024	30 Jun 2023	
	Machine Age	hrs	Client Info		967	477	
	Oil Age	hrs	Client Info		500	80	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR  Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m	>100	19	26	
	Chromium	ppm	ASTM D5185m	>20	1	2	
	Nickel	ppm	ASTM D5185m	>4	<1	0	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	4	3	
	Lead	ppm	ASTM D5185m	>40	<1	0	
	Copper	ppm	ASTM D5185m	>330	4	11	
	Tin	ppm	ASTM D5185m	>15	<1	<1	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	12	15	
	Potassium	ppm	ASTM D5185m		1	2	
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.9	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	21.0	
	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	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		6	4	
	Boron	ppm	ASTM D5185m	2.5	29	33	
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	6	
	Molybdenum	ppm	ASTM D5185m	0.7	41	1	
	Manganese	ppm	ASTM D5185m	0.0	1	2	
	Magnesium	ppm	ASTM D5185m	256	502	161	
	Calcium	ppm	ASTM D5185m		1777	2366	
	Phosphorus	ppm	ASTM D5185m	935	889	711	
	Zinc	ppm	ASTM D5185m	1223	1125	848	
	Sulfur	ppm	ASTM D5185m	4079	3267	2855	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	18.3	
	Base Number (BN)	mg KOH/g	ASTM D2896	10	9.6	10.5	
	Visc @ 100°C	cSt	ASTM D445	15.0	12.8	13.8	





Certificate L2367

Report Id: VOLVO0093 [WUSCAR] 06190161 (Generated: 05/28/2024 09:30:05) Rev: 1

Laboratory Sample No.

Lab Number : 06190161

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VCP437945

Received **Tested** Unique Number : 11046913

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

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

: 24 May 2024 : 28 May 2024 : 28 May 2024 - Wes Davis

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC 8418 PALM RIVER ROAD

TAMPA, FL US 33619 Contact: JOHN FARDELLA

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.

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