WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

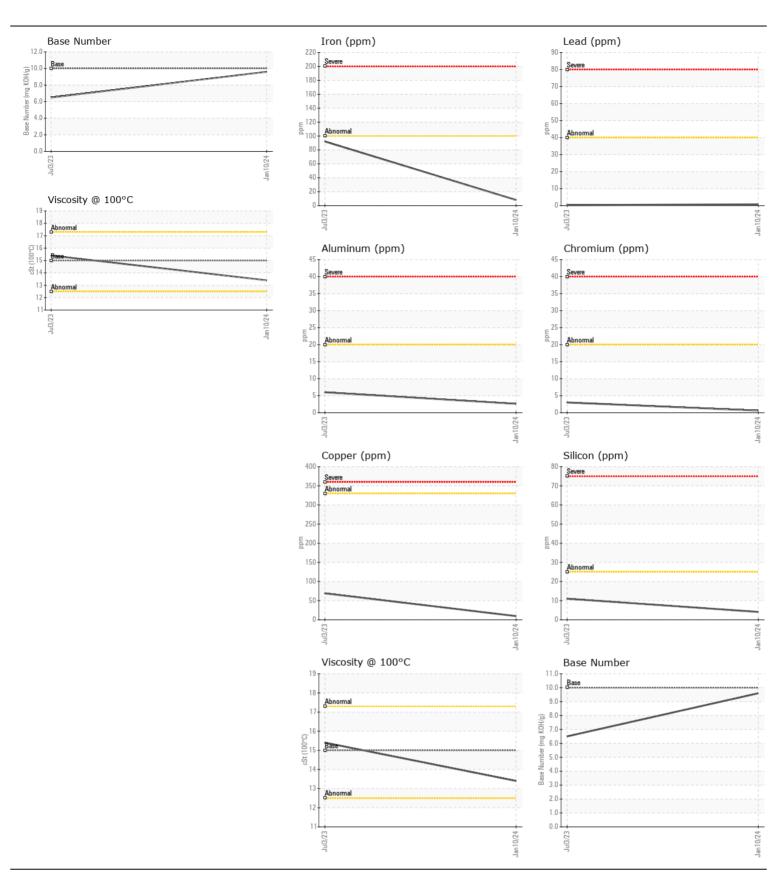
[SWA443779]

TAKEUCHI TL10V2 410004617

Component 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		VCP441331	VCP420586	
	Sample Date		Client Info		10 Jan 2024	03 Jul 2023	
	Machine Age	hrs	Client Info		0	1060	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	8	92	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	3	
	Nickel	ppm	ASTM D5185m	>4	2	<1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m	>3	<1	0	
	Aluminum	ppm	ASTM D5185m	>20	3	6	
	Lead	ppm	ASTM D5185m	>40	<1	<1	
	Copper	ppm	ASTM D5185m	>330	10	69	
	Tin	ppm	ASTM D5185m	>15	0	1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	11	
SONTAMINATION	Potassium	ppm	ASTM D5185m		<1	3	
There is no indication of any contamination in the oil.	Fuel	le le · · ·	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.3	1.2	
	Nitration	Abs/cm	*ASTM D7624	>20	8.6	15.9	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	31.9	
	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		3	52	
	Boron	ppm	ASTM D5185m	2.5	29	12	
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	0	
	Molybdenum	ppm	ASTM D5185m	0.7	42	62	
	Manganese	ppm	ASTM D5185m		<1	2	
	Magnesium	ppm	ASTM D5185m	256	524	654	
	Calcium	ppm	ASTM D5185m		1748	2792	
	Phosphorus	ppm	ASTM D5185m	935	978	1594	
	Zinc	ppm	ASTM D5185m	1223	1271	2032	
	Sulfur	ppm	ASTM D5185m	4079	3015	4373	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	22.3	33.4	
	Base Number (BN)	mg KOH/g	ASTM D2896	10	9.6	6.5	
	Visc @ 100°C	cSt	ASTM D445	15.0	13.4	15.4	







Laboratory Sample No. Lab Number **Unique Number**

: VCP441331 : 06059070 : 10830452

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 12 Jan 2024 Diagnosed : 12 Jan 2024

Diagnostician : Wes Davis

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

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