[ASSURED CONTRACTING] Machine Id TAKEUCHI TL10V2 410002681 Component

Diesel Engine

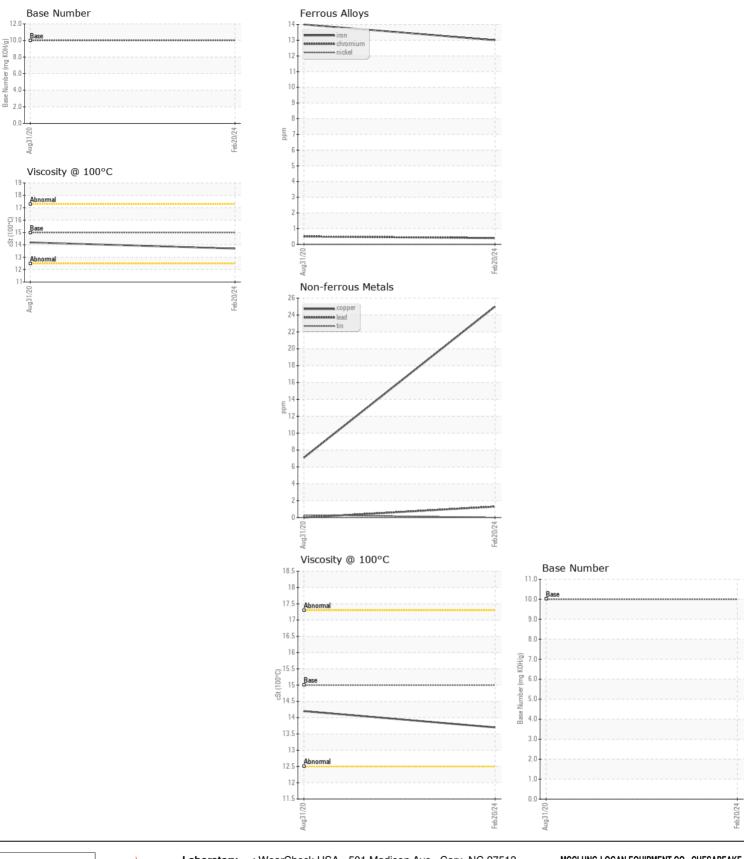
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

VOLVO ULI KA DIESEL ENGINE UIL 15W40 VL	73-3 (GAI	. /					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		ML0000766	VCP283915	
	Sample Date		Client Info		20 Feb 2024	31 Aug 2020	
	Machine Age	hrs	Client Info		586	345	
	Oil Age	hrs	Client Info		586	345	
	Filter Age	hrs	Client Info		586	0	
	Oil Changed		Client Info		Changed	Not Changd	
	Filter Changed		Client Info		N/A	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	13	14	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	<1	
	Nickel	ppm	ASTM D5185m	>4	0	0	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	3	0	
	Lead	ppm	ASTM D5185m	>40	1	0	
	Copper	ppm	ASTM D5185m	>330	25	7	
	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	5	5	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2	<1	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	10.5	8.6	
	Sulfation	Abs/.1mm	*ASTM D7415		19.8	20.2	
	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		5	6	
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	2.5	66	92	
	Barium	ppm	ASTM D5185m	0.0	0	<1	
	Molybdenum	ppm	ASTM D5185m		79	55	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		264	719	
	Calcium	ppm	ASTM D5185m		1991	1386	
	Phosphorus	ppm	ASTM D5185m		1041	878	
	Zinc	ppm	ASTM D5185m		1259	1048	
	Sulfur	ppm	ASTM D5185m		3578	2668	
	Oxidation	Abs/.1mm	*ASTM D7414		16.3	17.5	
	Base Number (BN)	mg KOH/g	ASTM D2896	10	6.2		
	Vian (2) 10000	- [] +		1 - 0	407		

Visc @ 100°C cSt ASTM D445 15.0

14.2

13.7



MCCLUNG-LOGAN EQUIPMENT CO - CHESAPEAKE Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : ML0000766 Received 4112 HOLLAND BLVD : 26 Feb 2024 Lab Number : 06100728 Tested : 27 Feb 2024 CHESAPEAKE, VA Unique Number : 10898958 Diagnosed : 28 Feb 2024 - Don Baldridge US 23323 Test Package : CONST (Additional Tests: TBN) Contact: TOMMY GRIFFIN Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. tgriffin@mcclung-logan.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (757)485-3314 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (757)485-3415