WEAR
CONTAMINATION
FLUID CONDITION

NORMAL NORMAL ATTENTION

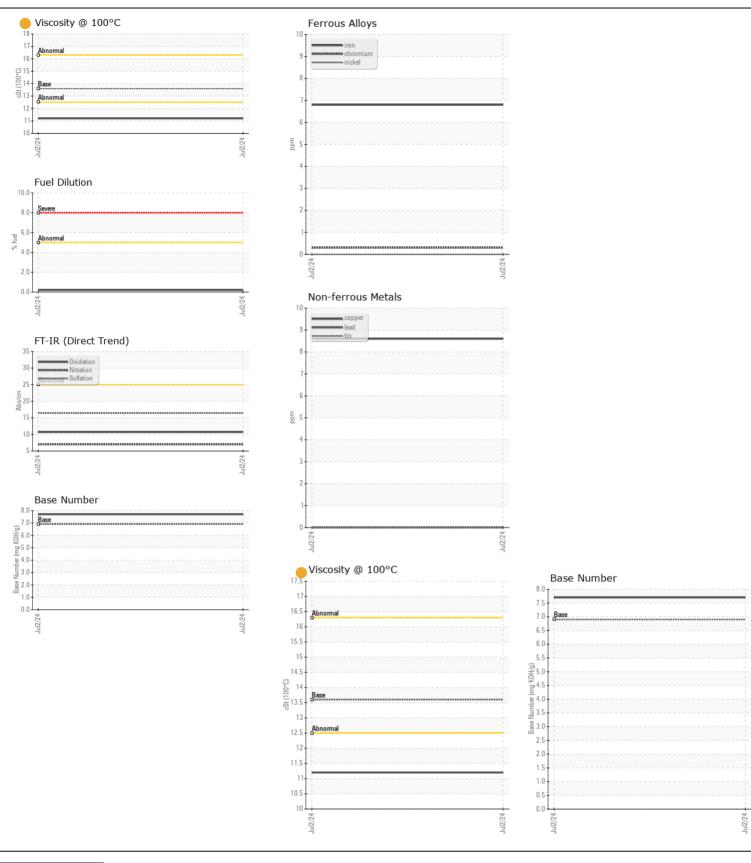
Machine Id

TAKEUCHI TL8R2 408007208

Diesel Engine

VALVOLINE 15W40 (--- GAL)

Sample Number Client Info 02 Jul 2024	/ALVOLINE 15W40 (GAL)							
Michael Mich	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The next service interval to monitor.		Sample Number		Client Info		ML0946539		
Machine Age hrs Cilient Info 61	Oil and filter change at the time of sampling has been noted. Hesample at the next service interval to monitor.	Sample Date		Client Info		02 Jul 2024		
Filter Age		Machine Age	hrs	Client Info		61		
Community Comm		Oil Age	hrs	Client Info		61		
Filter Changed Client Into Changed Cha		Filter Age	hrs	Client Info		61		
		Oil Changed		Client Info		Changed		
Iron		Filter Changed		Client Info		Changed		
Chromium Dpm ASTM D5185m S20 <1		Sample Status				ATTENTION		
Chromium Dpm ASTM D5185m S20 <1	VEAB	Iron	nom	ASTM D5185m	>100	7		
Nickel ppm	Metal levels are typical for a new component breaking in.							
Titanium ppm								
Silver								
Aluminum ppm ASTM D5185m >20 2					\3			
Lead								
Copper								
Tin								
Vanadium ppm ASTM D5185m 0								
White Metal Scalar Visual NONE NON					>10	-		
Vellow Metal Scalar Visual NONE NO					NONE	-		
Silicon ppm ASTM D5185m >25 6								
Potassium ppm ASTM D5185m s.20 3	<u></u>		Scalai	Visuai	INOINE			
Fuel % ASTM D3524 > 5 0.2	ONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6		
Water WC Method So.2 NEG NEG Sol WC Method So.2 NEG Sol	Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3		
Water WC Method So.2 NEG		Fuel	%	ASTM D3524	>5	0.2		
Soot %		Water		WC Method	>0.2	NEG		
Nitration Abs/cm		Glycol		WC Method		NEG		
Sulfation Abs/.tmm *AsTM D7415 >30 16.4 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML		Soot %	%	*ASTM D7844	>3	0.1		
Silt scalar *Visual NONE NONE NONE		Nitration	Abs/cm	*ASTM D7624	>20	7.0		
Debris Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NONE NORML NO		Sulfation	Abs/.1mm	*ASTM D7415	>30	16.4		
Sand/Dirt Scalar *Visual NONE NONE NONE NORML		Silt	scalar	*Visual	NONE	NONE		
Appearance Scalar *Visual NORML NORM		Debris	scalar	*Visual	NONE	NONE		
Color Scalar Visual NORML NO		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.2 NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium ppm ASTM D5185m 39 20		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 39 20 Molybdenum ppm ASTM D5185m 1 0 Magnesium ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 1 554 2310 Zinc ppm ASTM D5185m 1069 11074 Zinc ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D5185m 2624 3353 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7		Emulsified Water	scalar	*Visual	>0.2	NEG		
Boron ppm ASTM D5185m 39 20 Molybdenum ppm ASTM D5185m 1 0 Magnesium ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 1 554 2310 Zinc ppm ASTM D5185m 1069 11074 Zinc ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D5185m 2624 3353 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7								
Barium ppm ASTM D5185m 1 0 Molybdenum ppm ASTM D5185m 1 49 2 Magnesium ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 1554 2310 Phosphorus ppm ASTM D5185m 1069 1074 Zinc ppm ASTM D5185m 1069 1074 Sulfur ppm ASTM D5185m 2624 3353 Sulfur ppm ASTM D5185m 2624 3353 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7	LUID CONDITION		ppm					
Molybdenum ppm ASTM D5185m 49 2 Magnesium ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 1554 2310 Phosphorus ppm ASTM D5185m 1069 1074 Sulfur ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7	The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.		ppm					
Manganese ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 1 554 2310 Phosphorus ppm ASTM D5185m 1069 1074 Sulfur ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D7141 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7			ppm					
Magnesium ppm ASTM D5185m 616 13 Calcium ppm ASTM D5185m 1554 2310 Phosphorus ppm ASTM D5185m 899 915 Zinc ppm ASTM D5185m 1069 1074 Sulfur ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7			ppm			2		
Calcium ppm ASTM D5185m 1554 2310 Phosphorus ppm ASTM D5185m 899 915 Zinc ppm ASTM D5185m 1069 1074 Sulfur ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7			ppm					
Phosphorus ppm ASTM D5185m 899 915 Zinc ppm ASTM D5185m 1069 1074 Sulfur ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7		•	ppm					
Zinc ppm ASTM D5185m 1069 1074 Sulfur ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7								
Sulfur ppm ASTM D5185m 2624 3353 Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7			ppm					
Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7			ppm					
Base Number (BN) mg KOH/g ASTM D2896 6.9 7.7			ppm	ASTM D5185m	2624			
Visc @ 100°C cSt ASTM D445 13.6 (11.2)		Base Number (BN)	mg KOH/g	ASTM D2896	6.9	7.7		
		Visc @ 100°C	cSt	ASTM D445	13.6	11.2		







Certificate L2367

Laboratory Sample No.

: ML0946539 Lab Number : 06226978 Unique Number : 11110471

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

Received **Tested** Diagnosed

: 03 Jul 2024 : 08 Jul 2024

: 08 Jul 2024 - Don Baldridge Test Package: CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

358 KINGS HWY FREDERICKSBURG, VA US 22405 Contact: JW MEADOWS

To discuss this sample report, contact Customer Service at 1-800-237-1369.

jmeadows@mcclung-logan.com T:

MCCLUNG-LOGAN EQUIPMENT CO - FREDERICKSBURG

* - 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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