



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**TAKEUCHI TL12V2 412004695**  
 Component  
**Diesel Engine**  
 Fluid  
**VALVOLINE 15W40 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0946555	---	---
Sample Date		Client Info		20 Jun 2024	---	---
Machine Age	hrs	Client Info		98	---	---
Oil Age	hrs	Client Info		98	---	---
Filter Age	hrs	Client Info		98	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	38	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	4	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	25	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

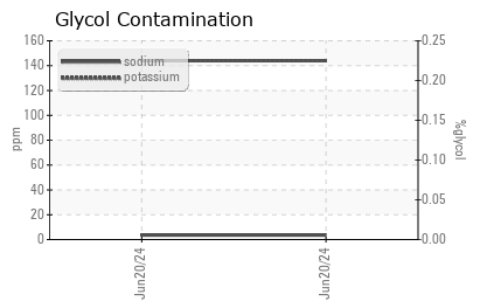
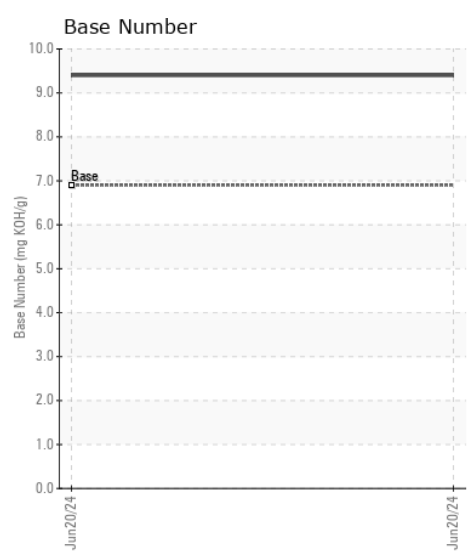
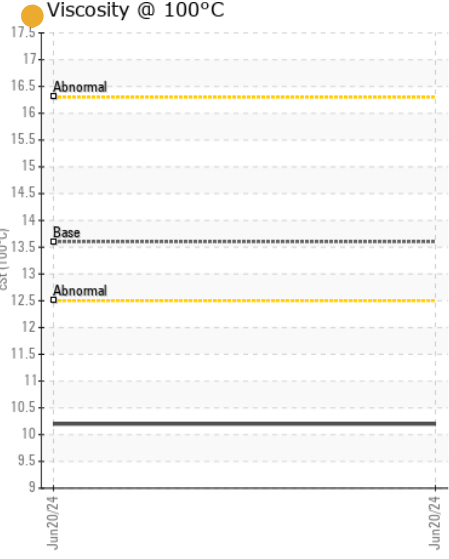
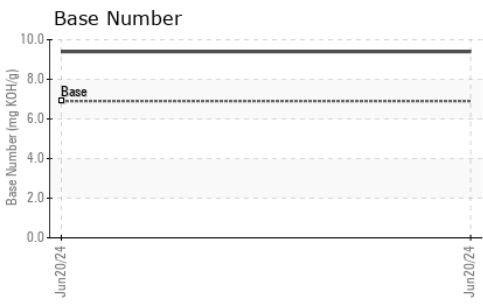
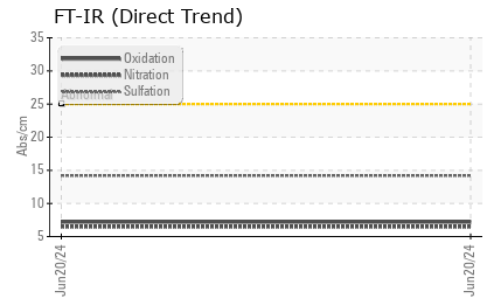
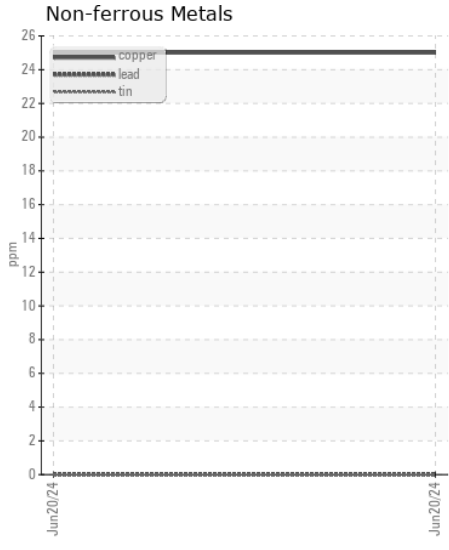
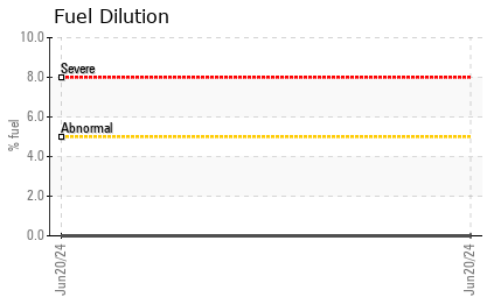
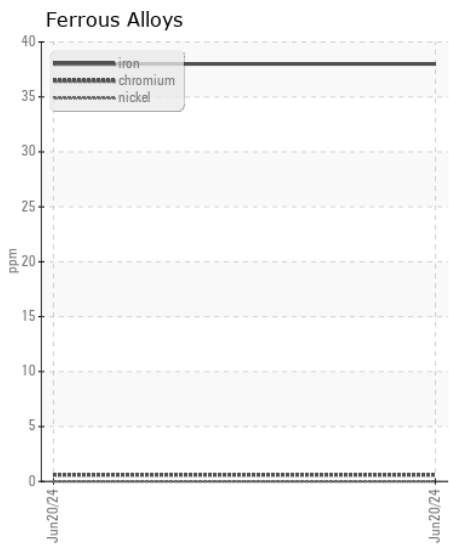
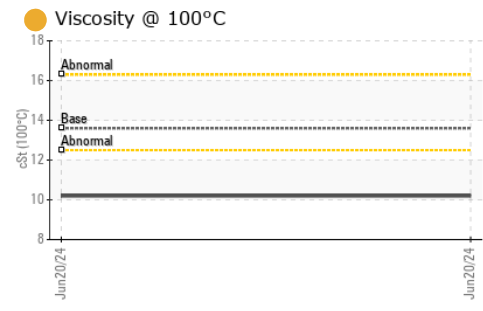
Sodium and/or potassium levels are high. Fuel content negligible. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	31	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 144	---	---
Fuel	%	ASTM D3524	>5	0.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.2	---	---
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

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	39	140	---	---
Barium	ppm	ASTM D5185m	1	5	---	---
Molybdenum	ppm	ASTM D5185m	49	140	---	---
Manganese	ppm	ASTM D5185m	1	1	---	---
Magnesium	ppm	ASTM D5185m	616	55	---	---
Calcium	ppm	ASTM D5185m	1554	2501	---	---
Phosphorus	ppm	ASTM D5185m	899	471	---	---
Zinc	ppm	ASTM D5185m	1069	567	---	---
Sulfur	ppm	ASTM D5185m	2624	2696	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	9.4	---	---
Visc @ 100°C	cSt	ASTM D445	13.6	● 10.2	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0946555 **Received** : 03 Jul 2024  
**Lab Number** : 06226979 **Tested** : 08 Jul 2024  
**Unique Number** : 11110472 **Diagnosed** : 08 Jul 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, Glycol, PercentFuel, TBN )

**MCCLEUNG-LOGAN EQUIPMENT CO - FREDERICKSBURG**  
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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)