



# VOLVO

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**[SPM688446 SCORIA]**  
 Machine Id  
**HITACHI ZW250-6 ZW2506-005232**  
 Component  
**Front Differential**  
 Fluid  
**TDTO FLUID SAE 50 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP418808</b>	VCP369260	VCP404884
Sample Date		Client Info		<b>21 Mar 2024</b>	20 Jun 2023	28 Mar 2023
Machine Age	hrs	Client Info		<b>5641</b>	4504	3973
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>22</b>	173	167
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	2	2
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>100	<b>2</b>	2	3
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

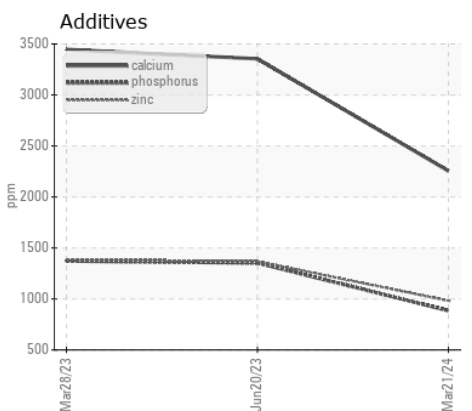
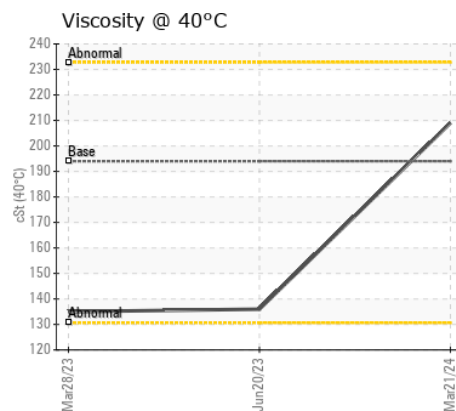
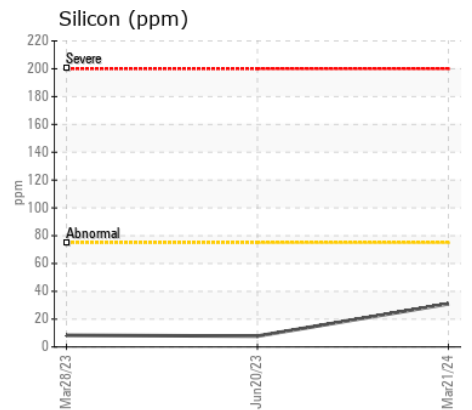
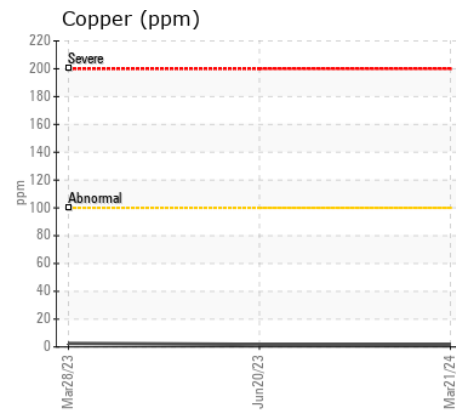
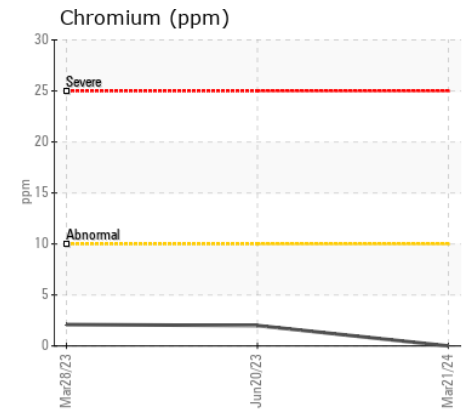
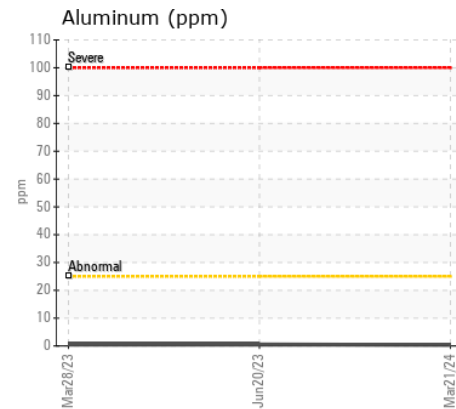
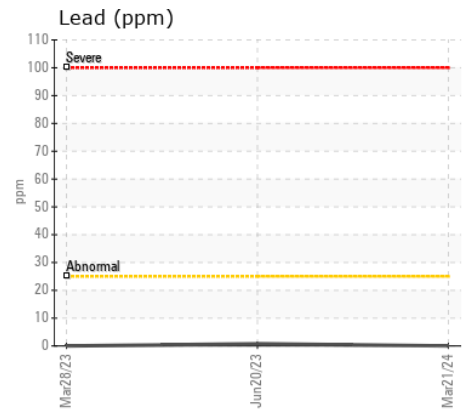
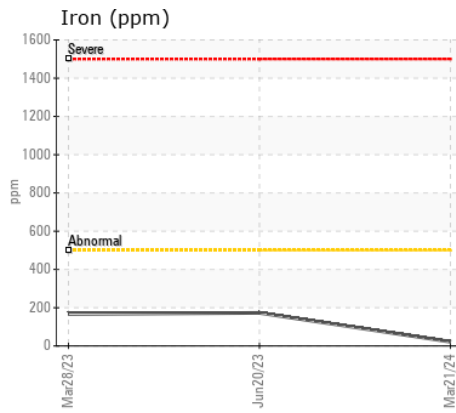
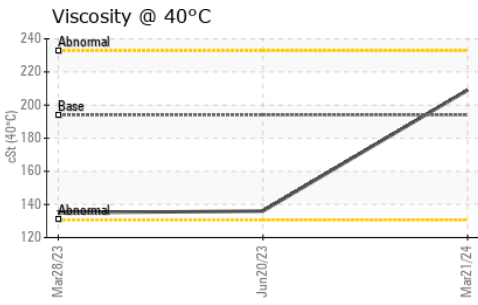
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>31</b>	8	8
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	1
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	3
Boron	ppm	ASTM D5185m	37	<b>5</b>	0	<1
Barium	ppm	ASTM D5185m	7	<b>0</b>	2	2
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	3	3
Magnesium	ppm	ASTM D5185m	40	<b>39</b>	19	16
Calcium	ppm	ASTM D5185m	2650	<b>2255</b>	3354	3446
Phosphorus	ppm	ASTM D5185m	1050	<b>884</b>	1353	1372
Zinc	ppm	ASTM D5185m	1075	<b>982</b>	1368	1386
Sulfur	ppm	ASTM D5185m	5750	<b>12175</b>	13039	13652
Visc @ 40°C	cSt	ASTM D445	194	<b>209</b>	136	135



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP418808  
**Lab Number** : 06154846  
**Unique Number** : 10990269  
**Test Package** : MOB 1

**Received** : 19 Apr 2024  
**Tested** : 22 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Don Baldrige

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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)