WEAR
CONTAMINATION
FLUID CONDITION

NORMAL ABNORMAL ABNORMAL



VOLVO A40G 352341

Diesel Engine

MOBIL 15W40 (--- GAL)

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We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP433637	VCP416805	VCP331583
Sample Date		Client Info		02 Apr 2024	13 Feb 2024	11 Dec 2023
Machine Age	hrs	Client Info		7735	7384	7087
Oil Age	hrs	Client Info		351	297	222
Filter Age	hrs	Client Info		0	0	222
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	7	5	3
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	mqq	ASTM D5185m	>10	2	<1	0

## **WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	7	5	3
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	2	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	5	4	4
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>20	1	<1	<1
Tin	ppm	ASTM D5185m	>20	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

Sodium and/or potassium levels are high.

Silicon	ppm	ASTM D5185m	>20	7	7	6
Potassium	ppm	ASTM D5185m	>20	<u> </u>	12	18
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.5	7.6	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	19.5	18.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
Odor	scalar	*Visual	NORML	NORML	NORML	NORM
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG

## **FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil.

Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>118	<u> </u>	16	25
Boron	ppm	ASTM D5185m		62	65	113
Barium	ppm	ASTM D5185m		0	34	0
Molybdenum	ppm	ASTM D5185m		82	81	121
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		545	506	642
Calcium	ppm	ASTM D5185m		1503	1239	1219
Phosphorus	ppm	ASTM D5185m		799	627	771
Zinc	ppm	ASTM D5185m		896	786	833
Sulfur	ppm	ASTM D5185m		3198	2838	3619
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	17.0	14.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.3	7.9	6.9

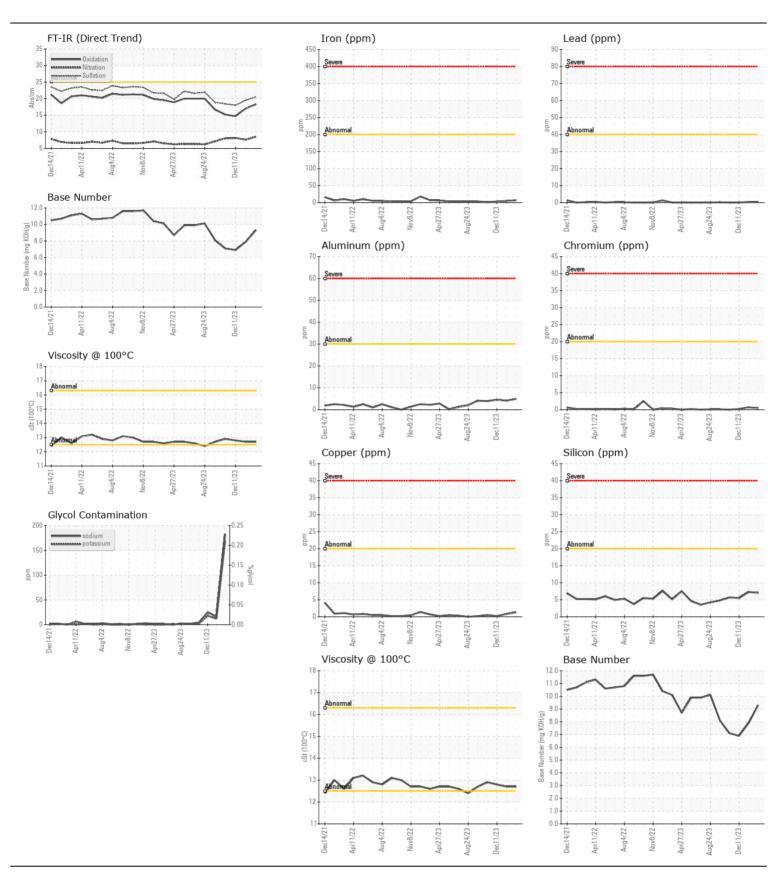
ASTM D445

Visc @ 100°C cSt

12.7

12.7

12.8





Certificate L2367

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 06154052

: VCP433637

Received **Tested** Unique Number : 10989475

: 19 Apr 2024 Diagnosed Test Package : MOB 1 (Additional Tests: Glycol, TBN)

: 23 Apr 2024 : 23 Apr 2024 - Jonathan Hester

SCHILDBERG CONSTRUCTION COMPANY PO BOX 358 GREENFIELD, IA

> US 50849 Contact: SCOTT ARMSTRONG sarmstrong@schildberg.com

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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