



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**VOLVO EC950FL 410168**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP449692	VCP446913	VCP436260
Sample Date		Client Info		17 Jul 2024	23 Mar 2024	15 Jan 2024
Machine Age	hrs	Client Info		1948	1218	731
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	26	21	57
Chromium	ppm	ASTM D5185m	>20	1	1	3
Nickel	ppm	ASTM D5185m	>2	2	2	▲ 8
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	5	4	10
Lead	ppm	ASTM D5185m	>40	0	<1	2
Copper	ppm	ASTM D5185m	>330	24	51	132
Tin	ppm	ASTM D5185m	>15	0	1	6
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

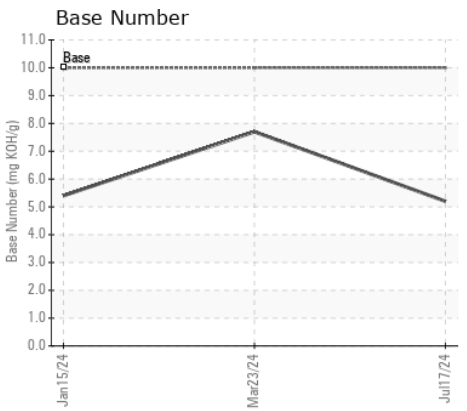
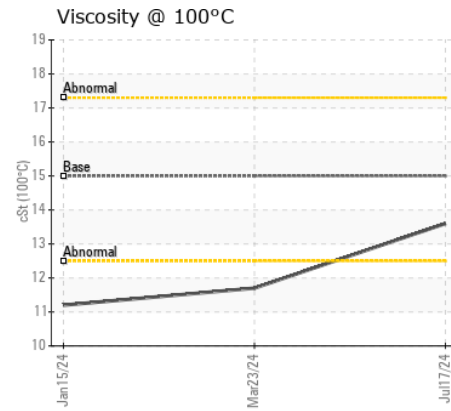
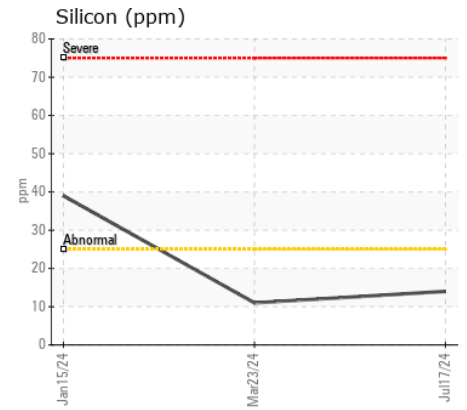
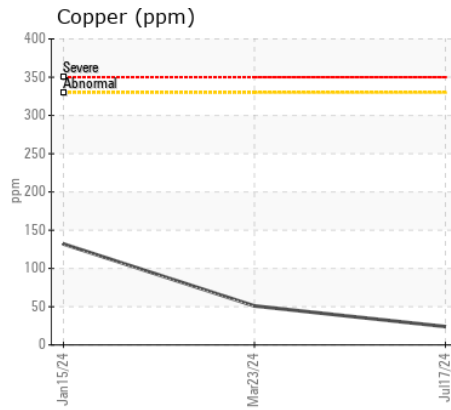
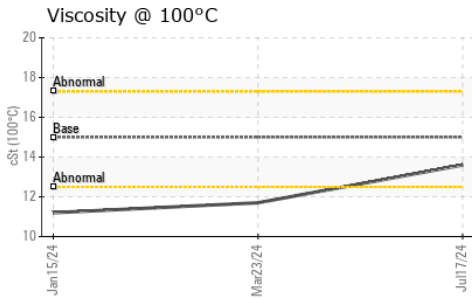
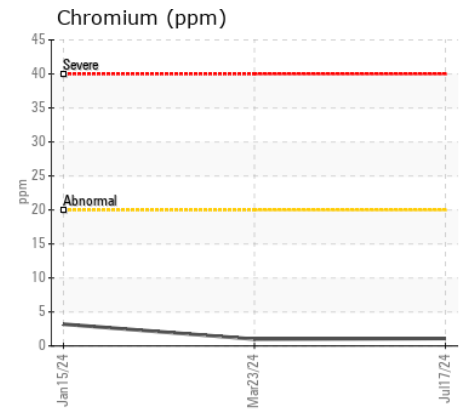
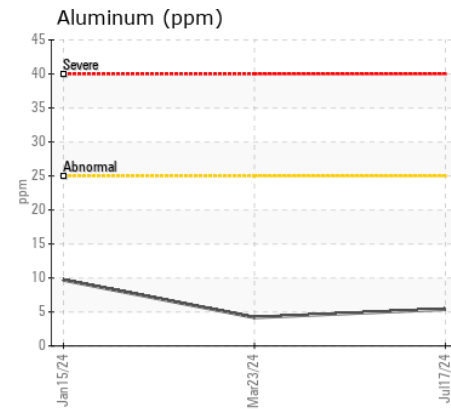
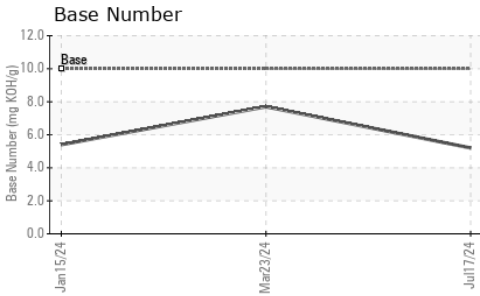
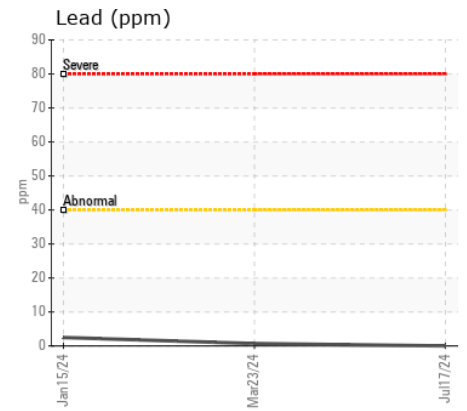
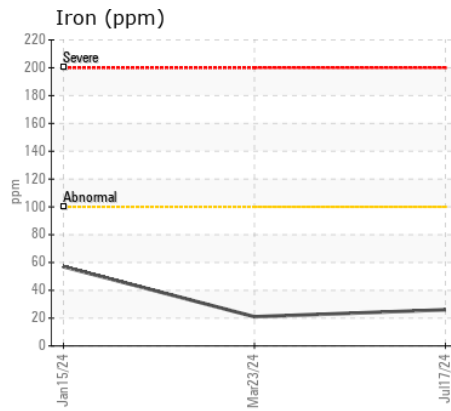
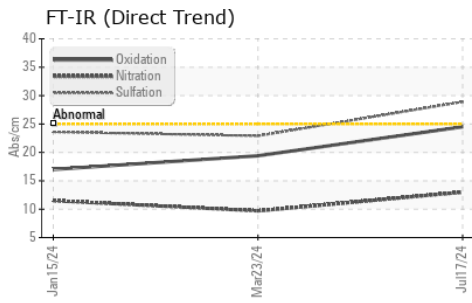
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	14	11	39
Potassium	ppm	ASTM D5185m	>20	5	3	22
Fuel		WC Method	>6.0	<1.0	<1.0	3.1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2.5	1.4	1.9
Nitration	Abs/cm	*ASTM D7624	>20	13.0	9.7	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.9	22.9	23.6
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	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	2	5
Boron	ppm	ASTM D5185m	2.5	8	14	8
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	44	49	74
Manganese	ppm	ASTM D5185m	0.0	<1	<1	2
Magnesium	ppm	ASTM D5185m	256	447	493	47
Calcium	ppm	ASTM D5185m	2057	1791	1799	2157
Phosphorus	ppm	ASTM D5185m	935	837	856	925
Zinc	ppm	ASTM D5185m	1223	1042	1065	1103
Sulfur	ppm	ASTM D5185m	4079	2516	3017	2946
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.5	19.4	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.2	7.7	5.4
Visc @ 100°C	cSt	ASTM D445	15.0	13.6	● 11.7	11.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP449692  
**Lab Number** : 06241284  
**Unique Number** : 11130118  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 19 Jul 2024  
**Tested** : 20 Jul 2024  
**Diagnosed** : 20 Jul 2024 - Wes Davis

**ALTA EQUIPMENT COMPANY**  
 5151 DR MARTIN LUTHER KING BLVD  
 FORT MYERS, FL  
 US 33905  
 Contact: TODD LARK  
 tlark@altaequipfl.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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