



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
[661201 BCSW]
Machine Id
VOLVO A40G 342555
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP439298	VCP425715	VCP406007
Sample Date		Client Info		02 Feb 2024	09 May 2023	21 Apr 2023
Machine Age	hrs	Client Info		11136	9586	9562
Oil Age	hrs	Client Info		0	20	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ATTENTION	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	2	10
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	11	4	5
Lead	ppm	ASTM D5185m	>40	3	0	0
Copper	ppm	ASTM D5185m	>330	4	<1	<1
Tin	ppm	ASTM D5185m	>15	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

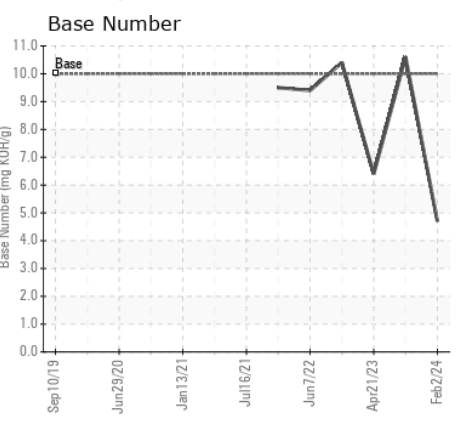
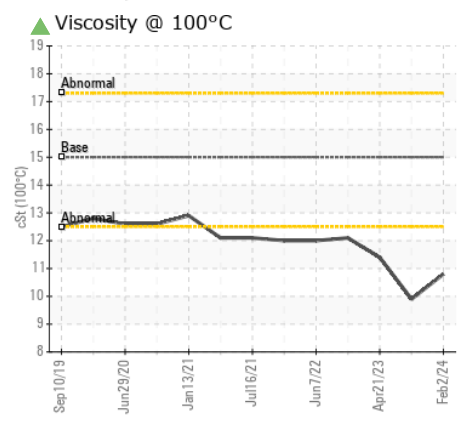
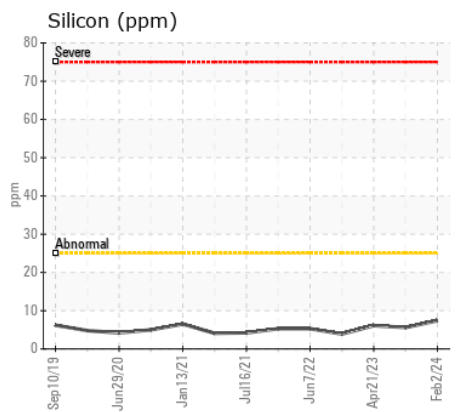
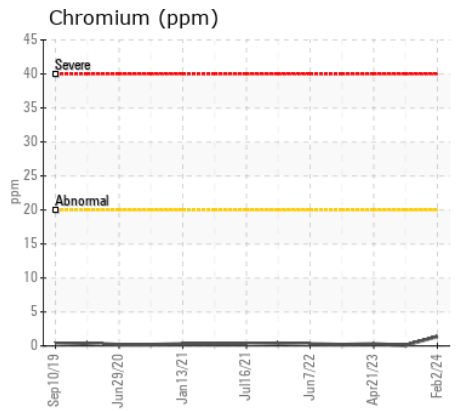
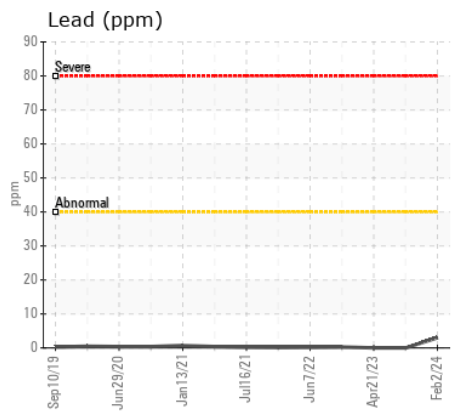
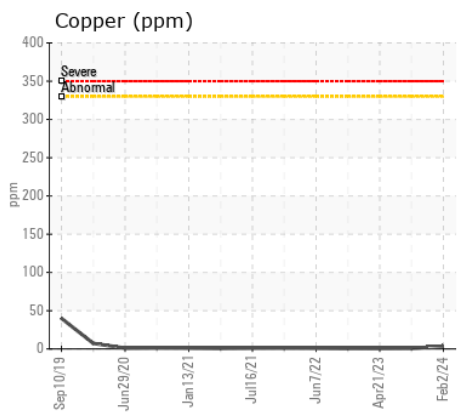
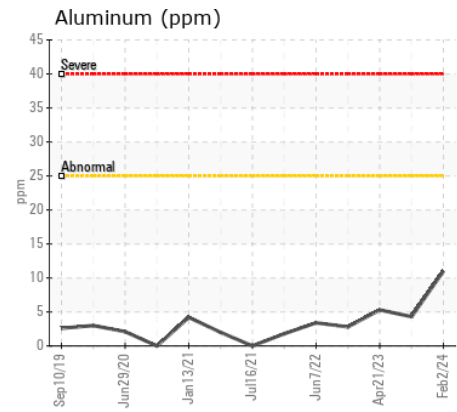
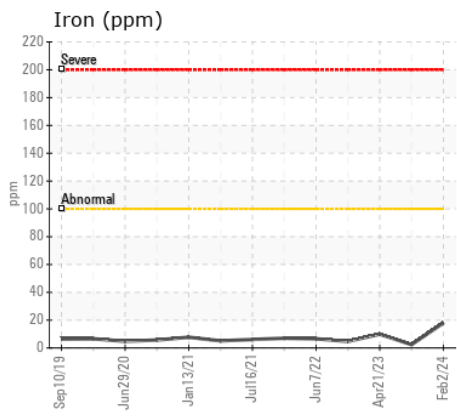
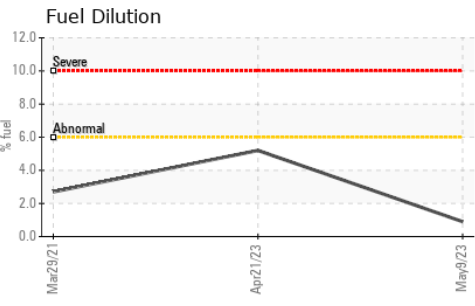
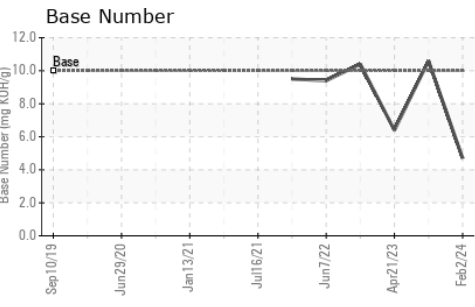
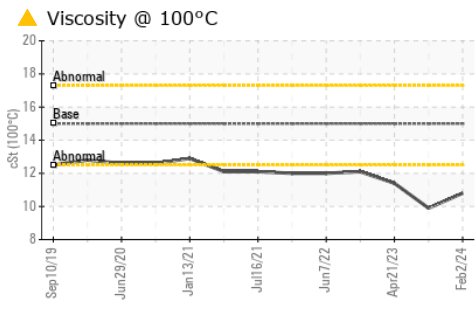
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	6	6
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Fuel	%	ASTM D3524	>6.0	<1.0	0.9	▲ 5.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	11.0	5.2	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.2	22.0	23.2
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 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		3	1	3
Boron	ppm	ASTM D5185m	2.5	9	60	17
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	41	39	43
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	445	499	514
Calcium	ppm	ASTM D5185m	2057	1589	1654	1585
Phosphorus	ppm	ASTM D5185m	935	789	877	850
Zinc	ppm	ASTM D5185m	1223	1026	1103	1094
Sulfur	ppm	ASTM D5185m	4079	2804	3247	3008
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.8	19.5	24.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	4.7	10.6	6.4
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 10.8	▲ 9.9	▲ 11.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP439298 **Received** : 08 Feb 2024
Lab Number : 06084153 **Tested** : 12 Feb 2024
Unique Number : 10871598 **Diagnosed** : 12 Feb 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: FuelDilution, TBN)

ALTA EQUIPMENT/FLAGLER EQUIPMENT LLC
 9601 BOGGY CREEK RD
 ORLANDO, FL
 US 32824
 Contact: Robert LaPlante
 robert.laplante@altg.com
 T: (407)508-9736
 F: (407)659-8720

Certificate L2367
 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)