



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
[ASN]
 Machine Id
VOLVO A60H 350269
 Component
Diesel Engine
 Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP402367	---	---
Sample Date		Client Info		22 Mar 2023	---	---
Machine Age	hrs	Client Info		1054	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	14	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>2	1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	0	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	215	---	---
Tin	ppm	ASTM D5185m	>15	1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

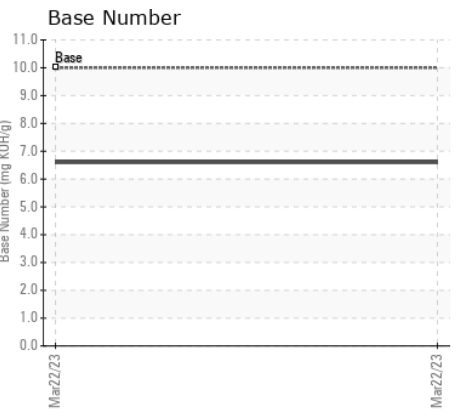
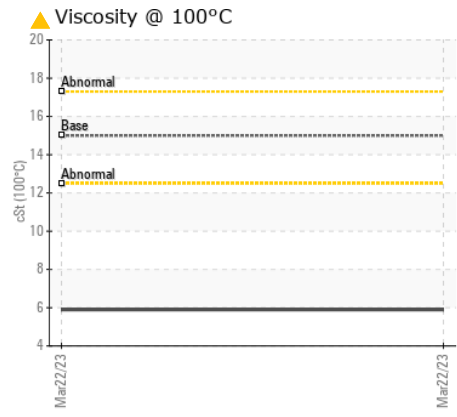
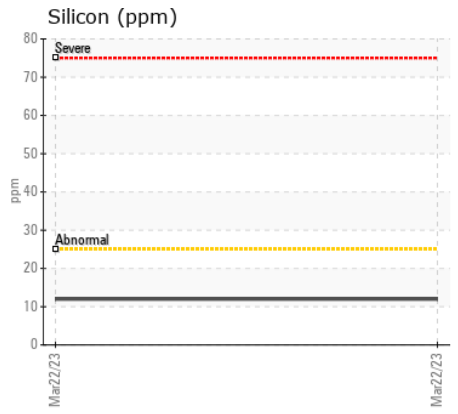
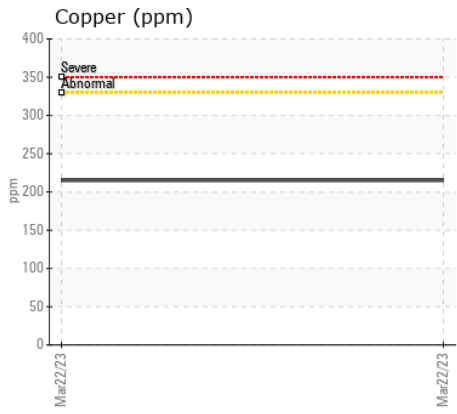
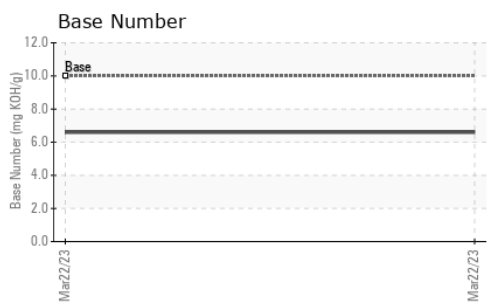
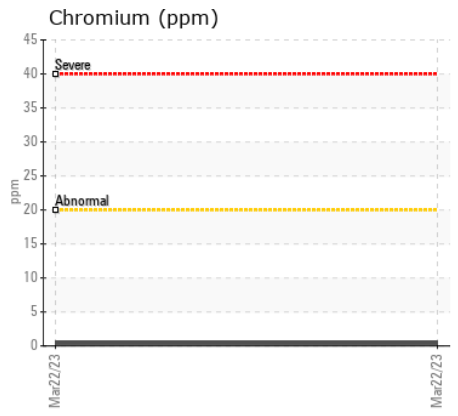
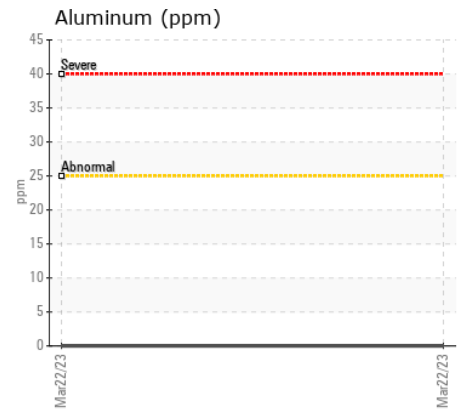
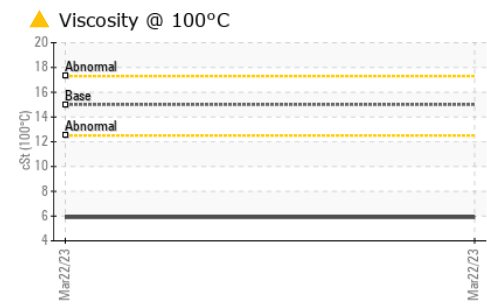
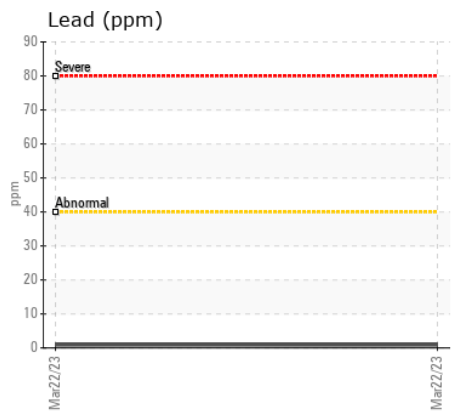
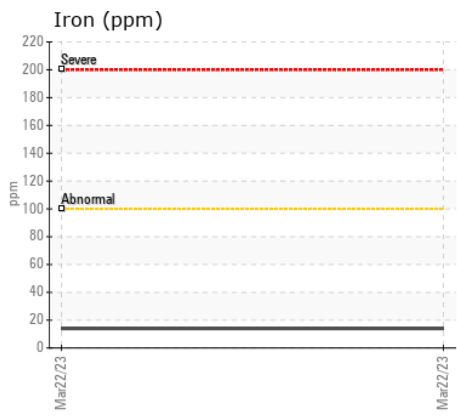
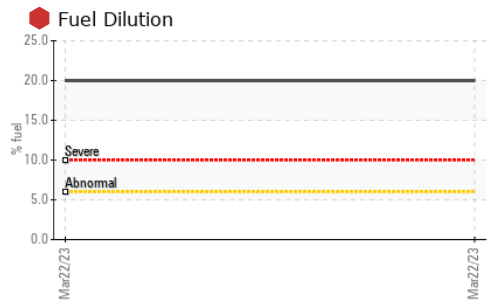
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	12	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Fuel	%	ASTM D3524	>6.0	20.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	---	---
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

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m	2.5	25	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	0.7	32	---	---
Manganese	ppm	ASTM D5185m	0.0	<1	---	---
Magnesium	ppm	ASTM D5185m	256	281	---	---
Calcium	ppm	ASTM D5185m	2057	1182	---	---
Phosphorus	ppm	ASTM D5185m	935	578	---	---
Zinc	ppm	ASTM D5185m	1223	700	---	---
Sulfur	ppm	ASTM D5185m	4079	1994	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.6	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	5.9	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP402367
Lab Number : 05880427
Unique Number : 10525530
Test Package : MOB 1 (Additional Tests: FuelDilution, PERCENTFUEL, TBN)

403 - ASCENDUM MACHINERY INC - FARGO
 3739 38TH ST SW, SUITE E
 FARGO, ND
 US 58104
 Contact: JESSE SCHEELE
 jesse.scheele@ascendummachinery.com

Certificate L2367
 Received : 22 Jun 2023
 Tested : 22 Jun 2023
 Diagnosed : 22 Jun 2023 - Doug Bogart
 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)