



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
VOLVO A30G 753148
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		ASC0010895	VCP433999	VCP403225
Sample Date		Client Info		14 Jun 2024	07 Aug 2023	10 Apr 2023
Machine Age	hrs	Client Info		2178	1030	593
Oil Age	hrs	Client Info		2178	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				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	7	19	22
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	2	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>25	3	0	0
Lead	ppm	ASTM D5185m	>40	<1	2	4
Copper	ppm	ASTM D5185m	>330	7	▲ 153	▲ 298
Tin	ppm	ASTM D5185m	>15	<1	1	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

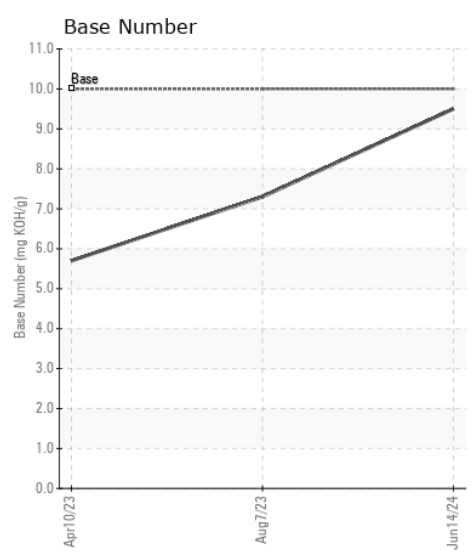
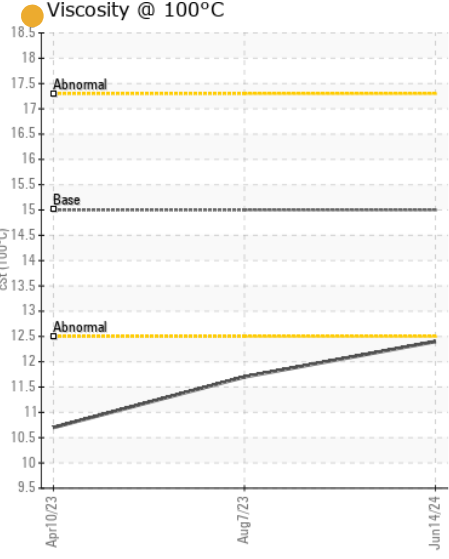
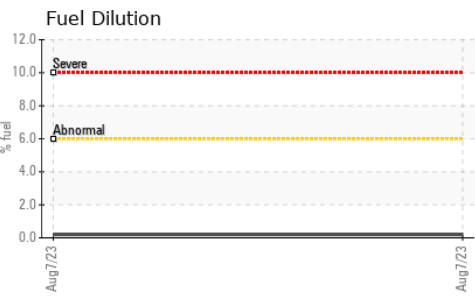
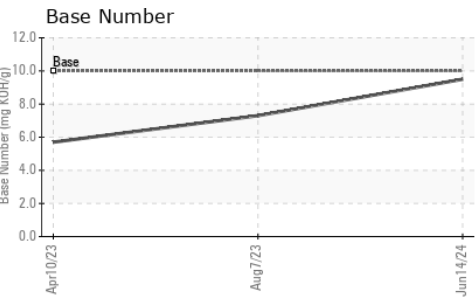
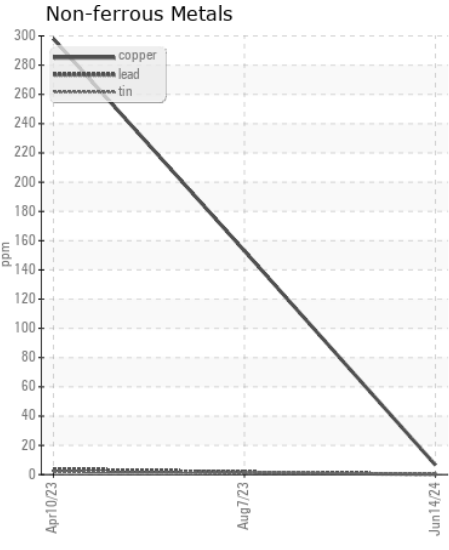
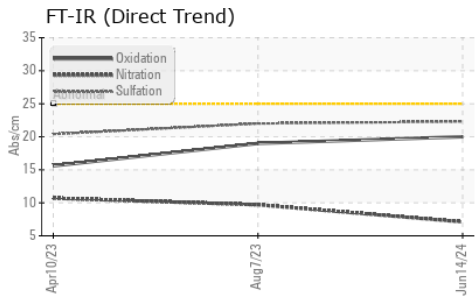
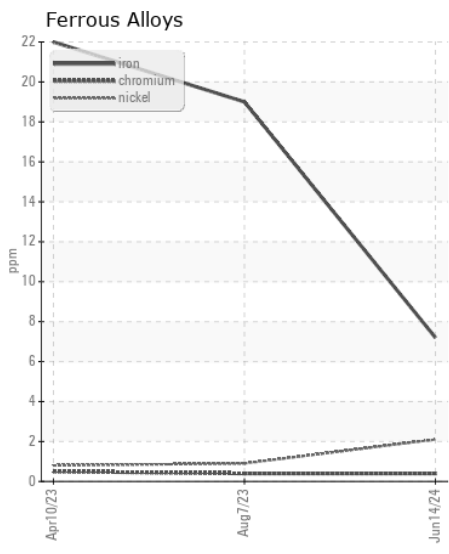
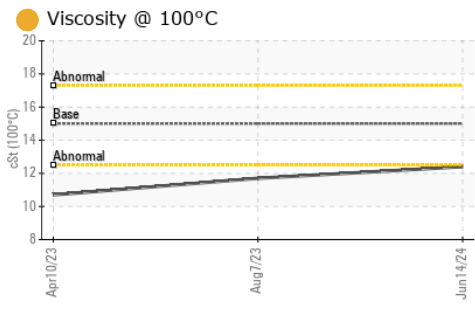
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	18	▲ 38
Potassium	ppm	ASTM D5185m	>20	2	1	4
Fuel	%	ASTM D3524	>6.0	<1.0	0.2	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.1	9.7	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	22.0	20.4
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		5	2	4
Boron	ppm	ASTM D5185m	2.5	50	20	29
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	43	56	78
Manganese	ppm	ASTM D5185m	0.0	<1	2	4
Magnesium	ppm	ASTM D5185m	256	534	330	46
Calcium	ppm	ASTM D5185m	2057	1750	1970	2168
Phosphorus	ppm	ASTM D5185m	935	1022	939	967
Zinc	ppm	ASTM D5185m	1223	1228	1175	1195
Sulfur	ppm	ASTM D5185m	4079	3551	3807	4407
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	19.0	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.5	7.3	5.7
Visc @ 100°C	cSt	ASTM D445	15.0	● 12.4	● 11.7	● 10.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0010895 **Received** : 27 Jun 2024
Lab Number : 06222034 **Tested** : 28 Jun 2024
Unique Number : 11100231 **Diagnosed** : 28 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

CW MATTHEWS
 1600 KENVIEW DRIVE
 MARIETTA, GA
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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)