CONST ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Machine Id
VOLVO A30G 752963
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 from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

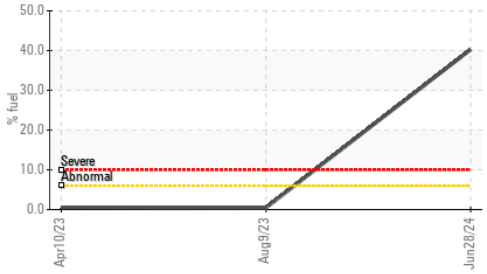
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

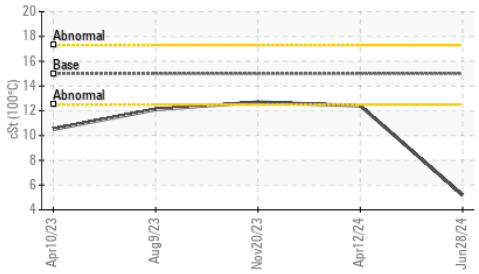
The oil viscosity is lower than normal. Fuel is present in the oil and is lowering the viscosity.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0004754	ASC0004845	VCP424500
Sample Date		Client Info		28 Jun 2024	12 Apr 2024	20 Nov 2023
Machine Age	hrs	Client Info		2039	1988	1528
Oil Age	hrs	Client Info		2039	500	500
Filter Age	hrs	Client Info		0	500	0
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	3	7	5
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>2	0	2	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	<1	2	<1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	2	3	<1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	5	3
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Fuel	%	ASTM D3524	>6.0	▲ 40.2	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	5.1	7.4	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	22.0	21.7
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
Sodium	ppm	ASTM D5185m		2	2	2
Boron	ppm	ASTM D5185m	2.5	38	45	54
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	25	42	37
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	329	485	497
Calcium	ppm	ASTM D5185m	2057	1112	1639	1712
Phosphorus	ppm	ASTM D5185m	935	620	946	964
Zinc	ppm	ASTM D5185m	1223	724	1100	1096
Sulfur	ppm	ASTM D5185m	4079	2110	3107	2839
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.8	20.3	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.8	9.8	10.3
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 5.2	12.4	12.7

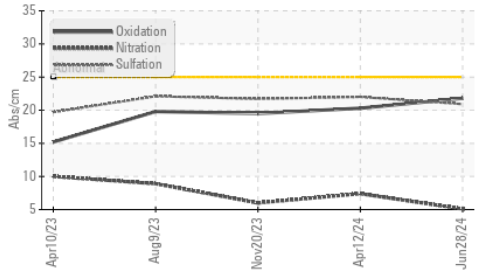
Fuel Dilution



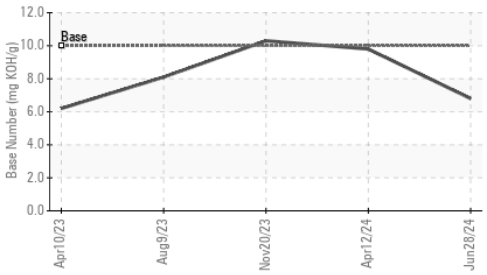
Viscosity @ 100°C



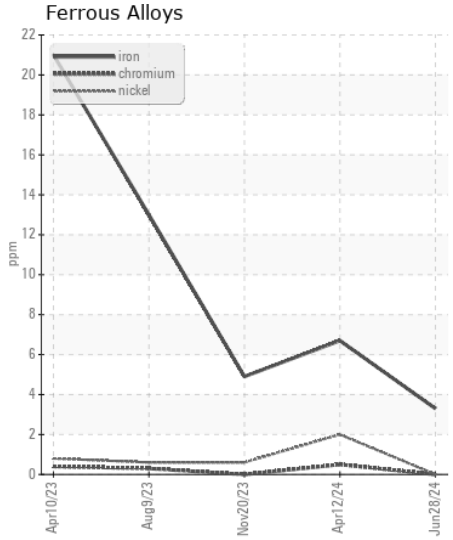
FT-IR (Direct Trend)



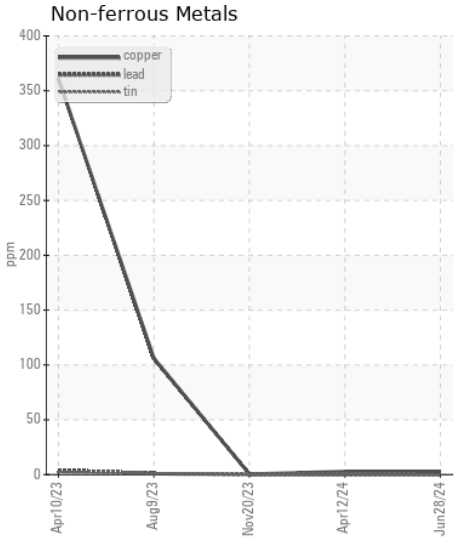
Base Number



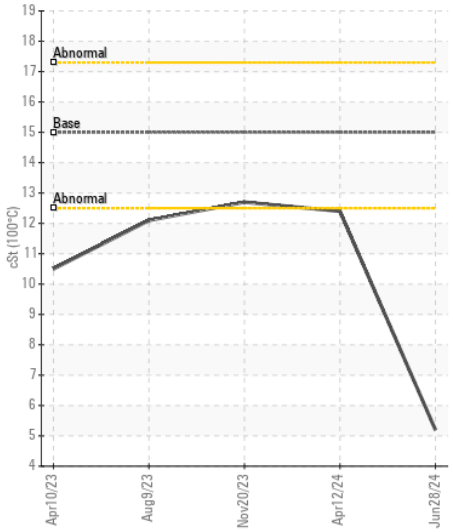
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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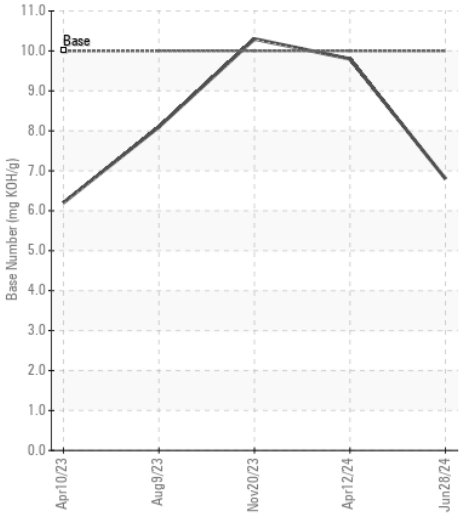

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0004754 **Received** : 05 Jul 2024
Lab Number : 06229401 **Tested** : 10 Jul 2024
Unique Number : 11112894 **Diagnosed** : 10 Jul 2024 - Angela Borella
Test Package : CONST (Additional Tests: FUELDILUTION, PercentFuel, TBN)

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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