CONST ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
VOLVO EC330CL 110117
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.

WEAR

All component wear rates are normal.

CONTAMINATION

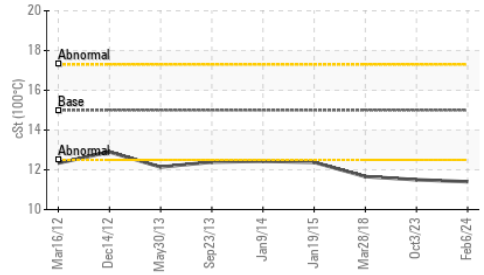
Light fuel dilution occurring.

FLUID CONDITION

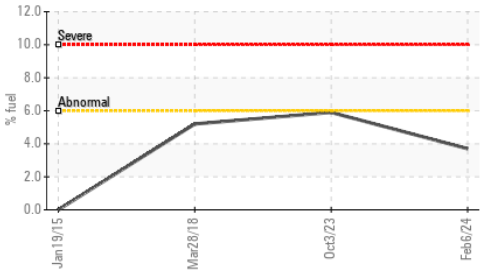
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0003362	ASC0003221	VCP231418
Sample Date		Client Info		06 Feb 2024	03 Oct 2023	28 Mar 2018
Machine Age	hrs	Client Info		12828	12778	9133
Oil Age	hrs	Client Info		12778	5324	0
Filter Age	hrs	Client Info		12778	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	5	16	5
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	2
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	3	2
Lead	ppm	ASTM D5185m	>20	2	8	<1
Copper	ppm	ASTM D5185m	>15	2	3	2
Tin	ppm	ASTM D5185m	>10	1	2	0
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	>20	4	4	4
Potassium	ppm	ASTM D5185m	>20	2	4	13
Fuel	%	ASTM D3524	>6.0	▲ 3.7	▲ 5.9	▲ 5.2
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	6.8	9.8	8.
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	22.1	21.
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	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		0	3	3
Boron	ppm	ASTM D5185m	2.5	62	60	45
Barium	ppm	ASTM D5185m	0.0	13	0	0
Molybdenum	ppm	ASTM D5185m	0.7	33	20	36
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	386	258	536
Calcium	ppm	ASTM D5185m	2057	1553	1880	1554
Phosphorus	ppm	ASTM D5185m	935	934	899	733
Zinc	ppm	ASTM D5185m	1223	1007	1104	860
Sulfur	ppm	ASTM D5185m	4079	3271	3066	2312
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	19.5	19.
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.3	6.9	---
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 11.4	▲ 11.5	▲ 11.66

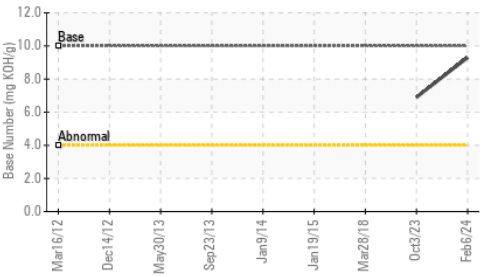
Viscosity @ 100°C



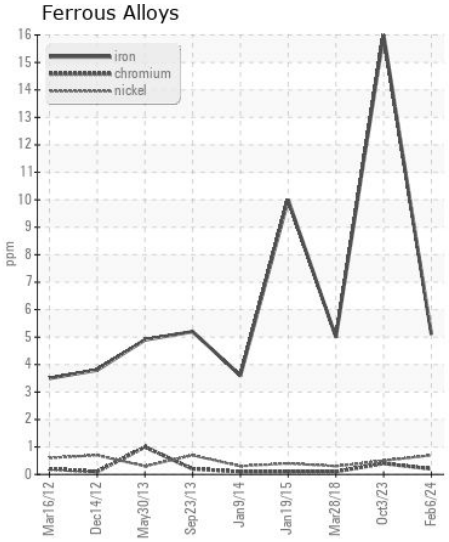
Fuel Dilution



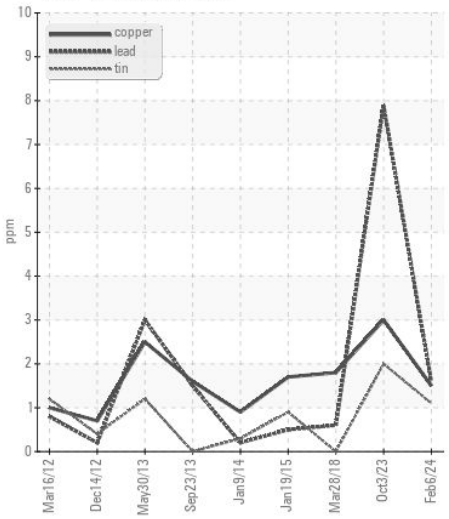
Base Number



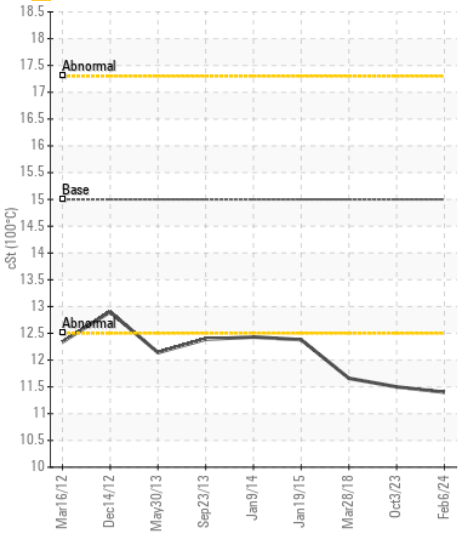
Ferrous Alloys



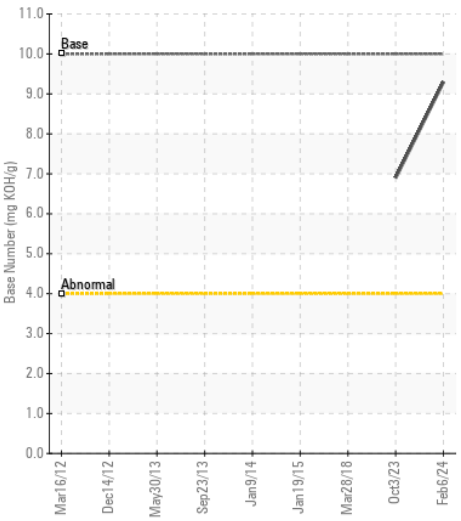
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0003362
Lab Number : 06085697
Unique Number : 10873142
Test Package : CONST (Additional Tests: PercentFuel, TBN)

Received : 12 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Jonathan Hester

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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