



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[VORTEX]
Machine Id
VOLVO EC200 314626
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006370	VCP0005004	VCP367009
Sample Date		Client Info		29 Jan 2024	17 Jan 2023	10 Aug 2022
Machine Age	hrs	Client Info		1974	1042	555
Oil Age	hrs	Client Info		500	0	0
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	14	19	45
Chromium	ppm	ASTM D5185m	>10	<1	2	5
Nickel	ppm	ASTM D5185m	>10	1	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	7	5	20
Lead	ppm	ASTM D5185m	>20	1	<1	<1
Copper	ppm	ASTM D5185m	>15	2	2	12
Tin	ppm	ASTM D5185m	>10	<1	<1	3
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

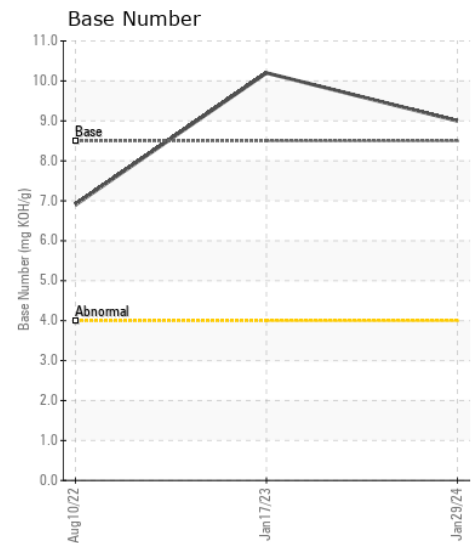
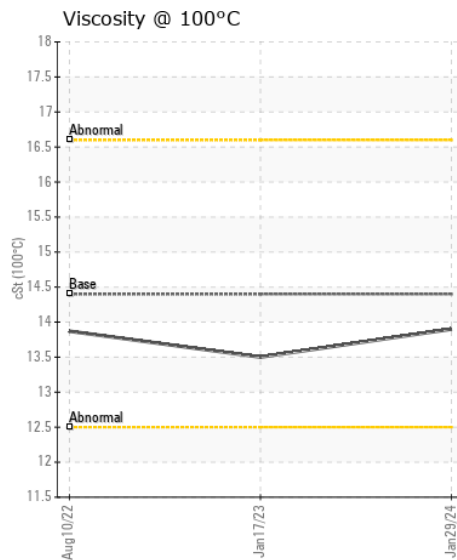
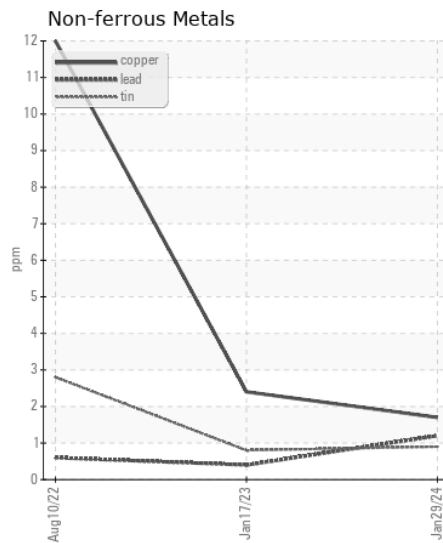
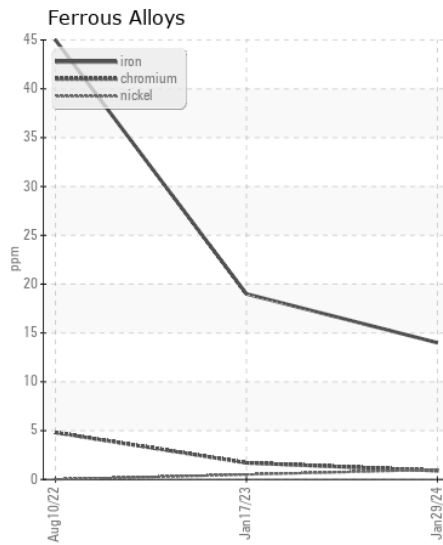
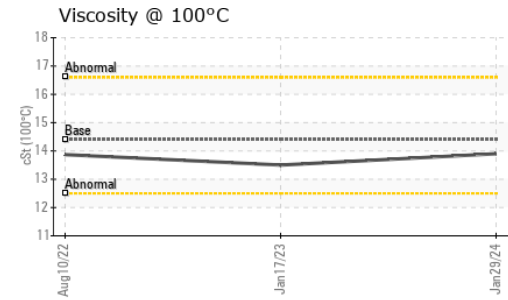
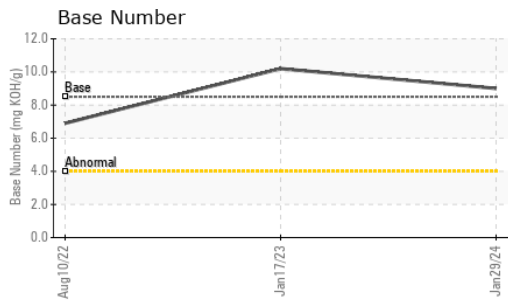
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	8	24
Potassium	ppm	ASTM D5185m	>20	3	<1	3
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.4	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	20.6	20.3
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

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	1	2	0
Boron	ppm	ASTM D5185m	250	4	17	2
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	57	42	1
Manganese	ppm	ASTM D5185m		<1	<1	5
Magnesium	ppm	ASTM D5185m	450	901	618	62
Calcium	ppm	ASTM D5185m	3000	1028	1602	2364
Phosphorus	ppm	ASTM D5185m	1150	1035	945	934
Zinc	ppm	ASTM D5185m	1350	1236	1199	1120
Sulfur	ppm	ASTM D5185m	4250	3062	3378	3888
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	17.7	13.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.0	10.2	6.9
Visc @ 100°C	cSt	ASTM D445	14.4	13.9	13.5	13.87



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0006370 **Received** : 31 Jan 2024
Lab Number : 06075515 **Diagnosed** : 01 Feb 2024
Unique Number : 10857606 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

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 US 27529

Contact: TRENT BROADWELL
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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)