



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery/500 Hour CSA
 Machine Id
VOLVO EC250E 2255 (S/N 316228)
 Component
Diesel Engine
 Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001613	VCP0005801	VCP0005207
Sample Date		Client Info		11 Jan 2024	01 Jun 2023	21 Nov 2022
Machine Age	hrs	Client Info		1405	1112	518
Oil Age	hrs	Client Info		293	594	518
Filter Age	hrs	Client Info		0	0	518
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	4	23	15
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	2
Aluminum	ppm	ASTM D5185m	>10	<1	7	8
Lead	ppm	ASTM D5185m	>20	0	3	<1
Copper	ppm	ASTM D5185m	>15	<1	▲ 367	▲ 732
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

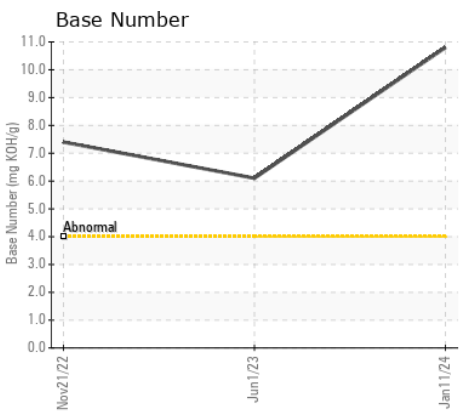
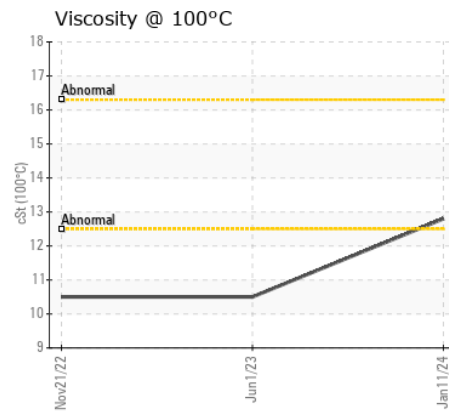
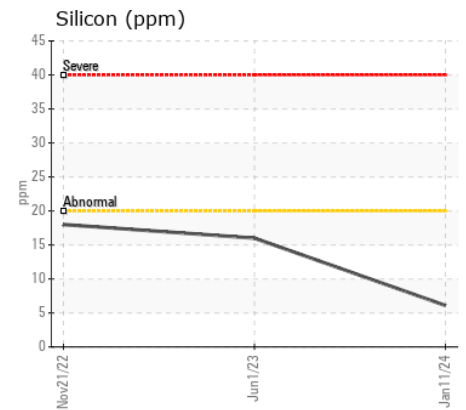
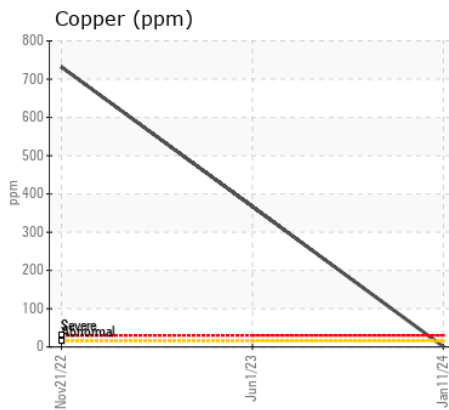
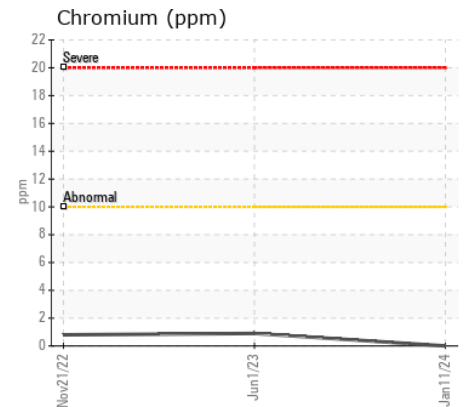
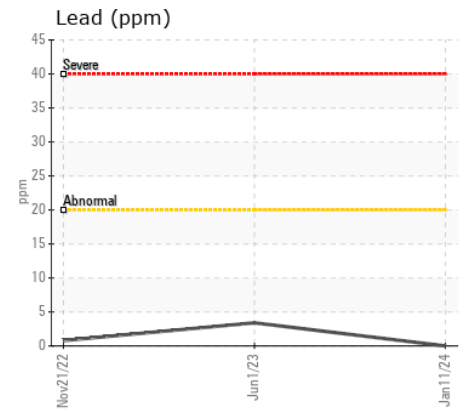
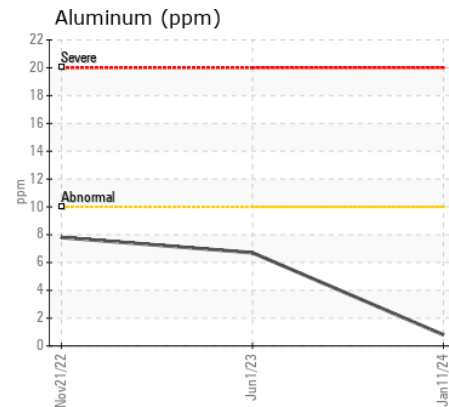
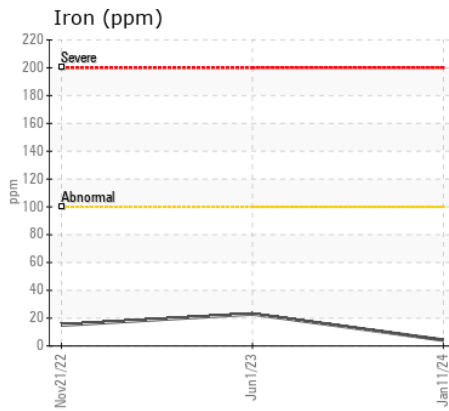
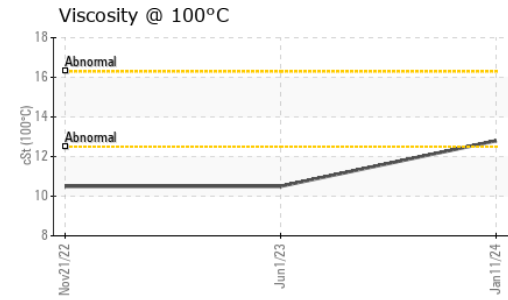
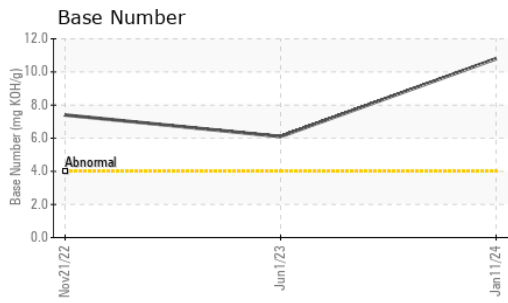
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	16	18
Potassium	ppm	ASTM D5185m	>20	0	14	10
Fuel		WC Method	>6.0	<1.0	<1.0	0.1
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.2	9.9	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	21.0	19.6
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		2	5	5
Boron	ppm	ASTM D5185m		63	17	40
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		40	79	79
Manganese	ppm	ASTM D5185m		<1	2	1
Magnesium	ppm	ASTM D5185m		513	213	126
Calcium	ppm	ASTM D5185m		1711	2150	2212
Phosphorus	ppm	ASTM D5185m		960	1049	1026
Zinc	ppm	ASTM D5185m		1129	1323	1207
Sulfur	ppm	ASTM D5185m		2957	4010	4485
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.5	16.7	15.6
Base Number (BN)	mg KOH/g	ASTM D2896		10.8	6.1	7.4
Visc @ 100°C	cSt	ASTM D445		12.8	▲ 10.5	▲ 10.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001613 **Received** : 17 Jan 2024
Lab Number : 06062335 **Diagnosed** : 18 Jan 2024
Unique Number : 10833717 **Diagnostician** : Wes Davis
Test Package : MOBCE (Additional Tests: 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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