



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO EW180E 322032

Component
Hydraulic System

Fluid
{not provided} (--- 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		ASC0003301	ASC0003495	VCP253178
Sample Date		Client Info		02 Jul 2024	05 Dec 2023	22 Oct 2019
Machine Age	hrs	Client Info		5495	5006	1000
Oil Age	hrs	Client Info		5495	1000	0
Filter Age	hrs	Client Info		0	1000	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Changed	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	5	2	3
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	<1	<1
Lead	ppm	ASTM D5185m	>20	0	<1	2
Copper	ppm	ASTM D5185m	>150	7	6	5
Tin	ppm	ASTM D5185m	>10	0	0	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

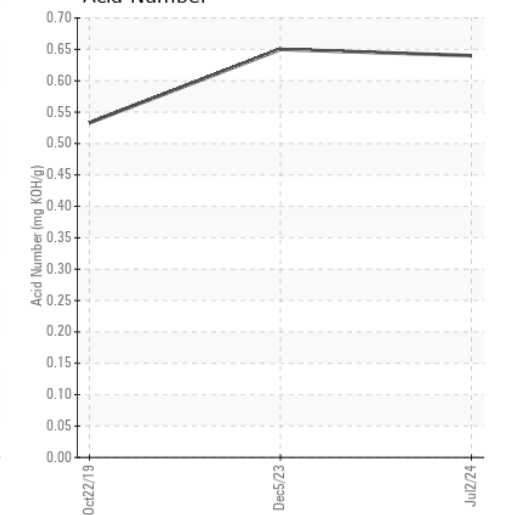
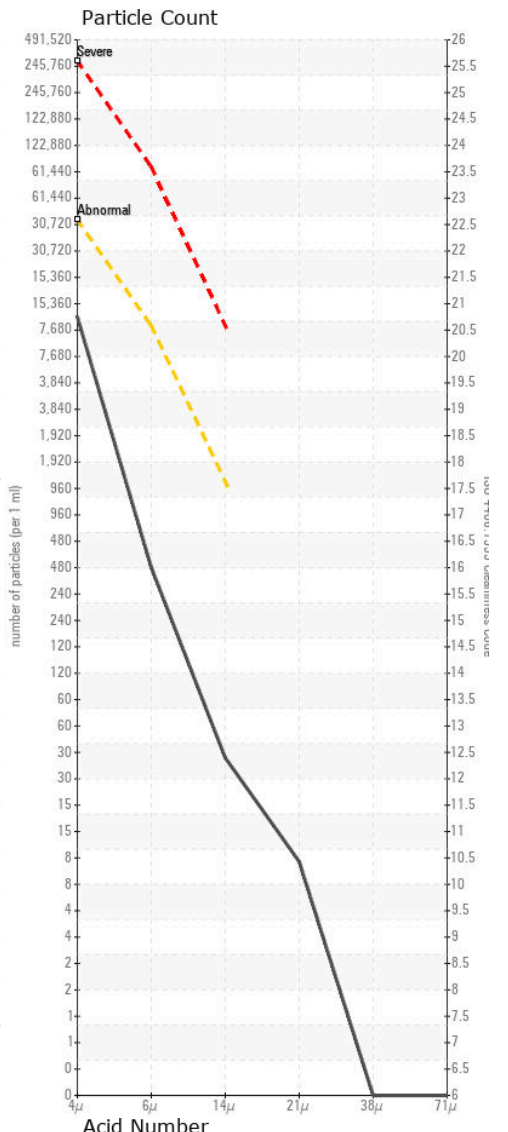
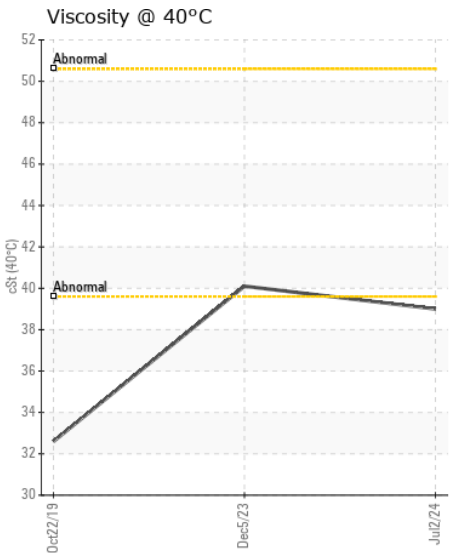
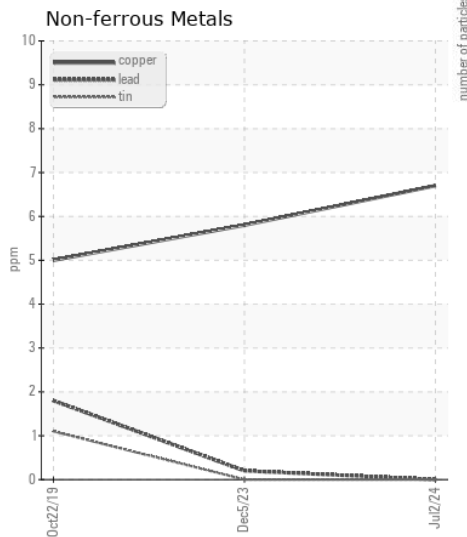
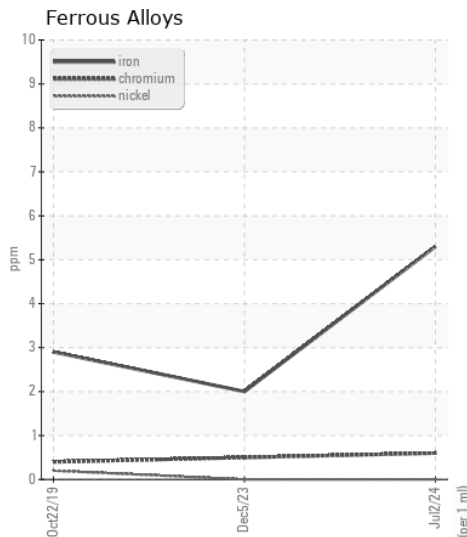
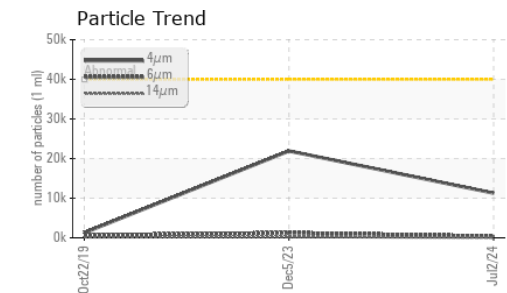
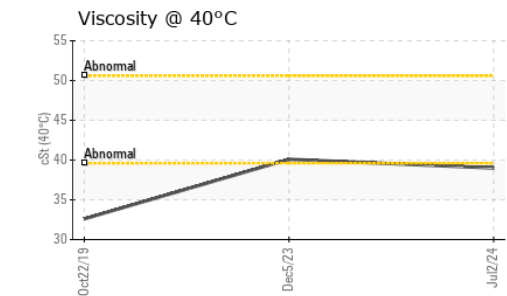
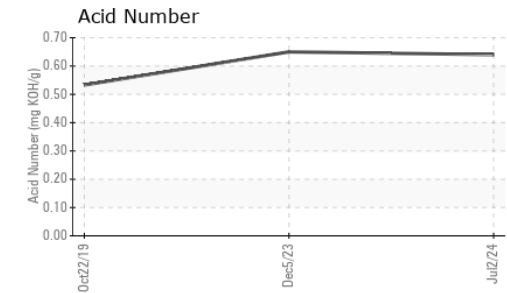
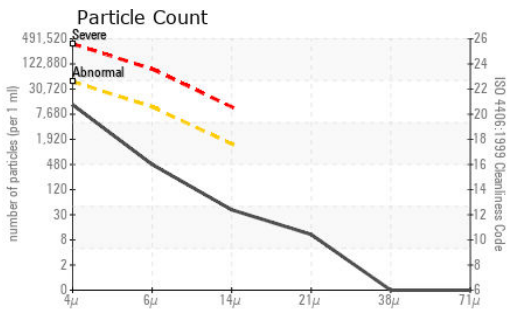
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	6	5	11
Potassium	ppm	ASTM D5185m	>20	1	0	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	11267	21919	1256
Particles >6µm		ASTM D7647	>10000	423	1280	684
Particles >14µm		ASTM D7647	>1300	35	201	116
Particles >21µm		ASTM D7647	>320	9	70	39
Particles >38µm		ASTM D7647	>80	0	5	6
Particles >71µm		ASTM D7647	>20	0	1	0
Oil Cleanliness		ISO 4406 (c)	>22/20/17	21/16/12	22/17/15	17/17/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	0.2%

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	3	2
Boron	ppm	ASTM D5185m		7	9	<1
Barium	ppm	ASTM D5185m		3	0	<1
Molybdenum	ppm	ASTM D5185m		7	5	<1
Manganese	ppm	ASTM D5185m		0	<1	1
Magnesium	ppm	ASTM D5185m		23	23	<1
Calcium	ppm	ASTM D5185m		585	577	104
Phosphorus	ppm	ASTM D5185m		545	515	497
Zinc	ppm	ASTM D5185m		618	588	637
Sulfur	ppm	ASTM D5185m		2756	2234	680
Acid Number (AN)	mg KOH/g	ASTM D8045		0.64	0.65	0.533
Visc @ 40°C	cSt	ASTM D445		39.0	40.1	32.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0003301
Lab Number : 06227343
Unique Number : 11110836
Test Package : CONST

Received : 03 Jul 2024
Tested : 05 Jul 2024
Diagnosed : 05 Jul 2024 - Wes Davis

160 - ASCENDUM MACHINERY INC - MILLS RIVER
 215 FANNING FIELDS RD
 MILLS RIVER, NC
 US 28759
 Contact: CORY PENLAND
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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)