



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO EC250EL 310378
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- 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		ASC0010491	VCP382811	VCP05727323
Sample Date		Client Info		09 Apr 2024	20 Aug 2023	28 Dec 2022
Machine Age	hrs	Client Info		5322	4478	3729
Oil Age	hrs	Client Info		1000	0	0
Filter Age	hrs	Client Info		1000	0	0
Oil Changed		Client Info		Not Changed	Not Changed	N/A
Filter Changed		Client Info		Changed	Not Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	5	5	5
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	<1	1
Lead	ppm	ASTM D5185m	>20	1	0	<1
Copper	ppm	ASTM D5185m	>150	33	43	43
Tin	ppm	ASTM D5185m	>10	1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

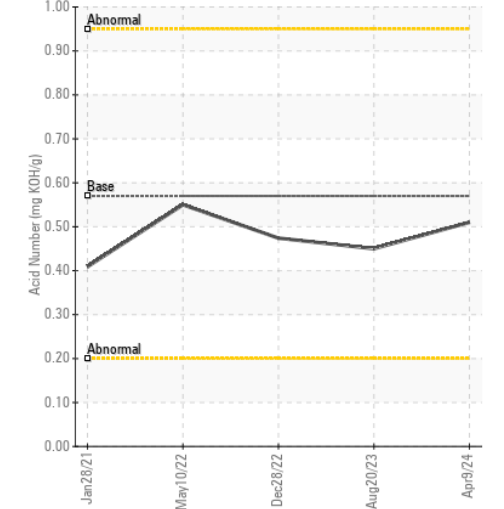
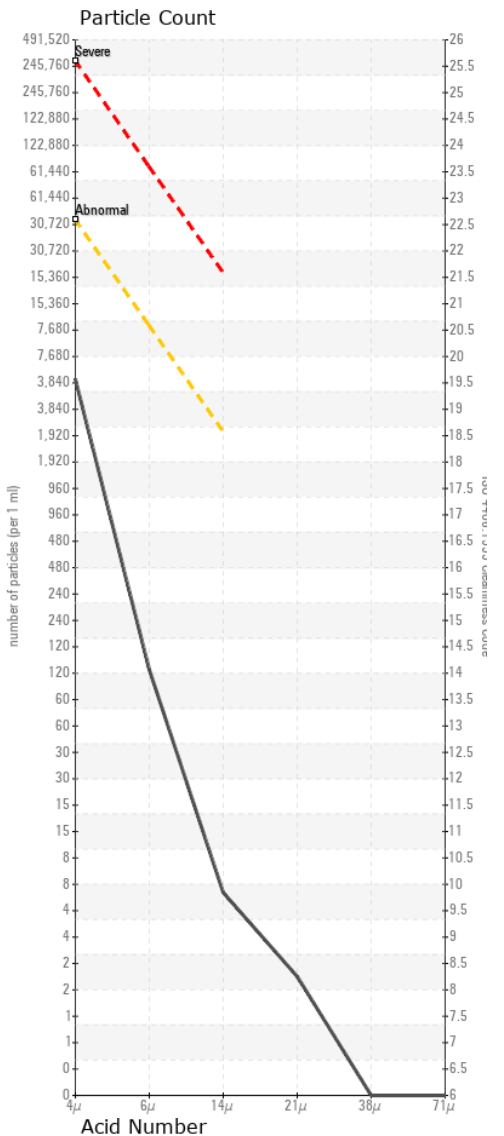
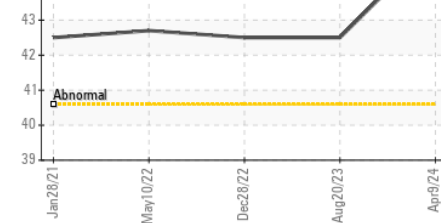
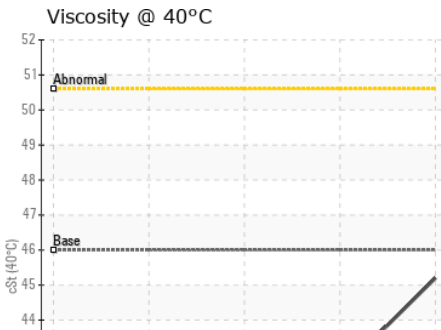
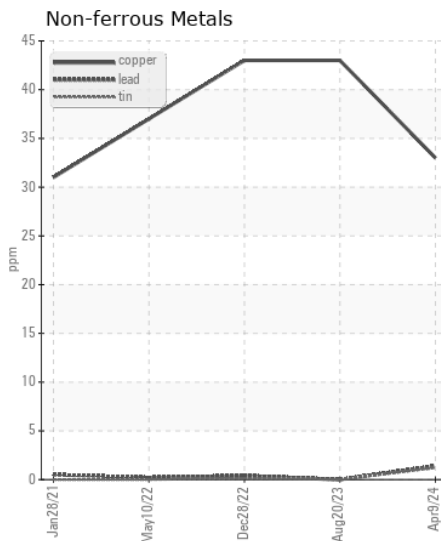
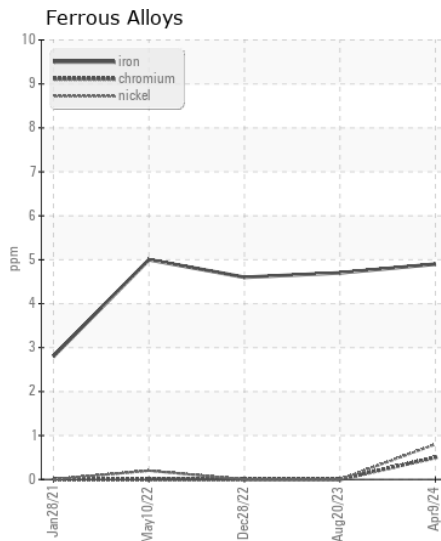
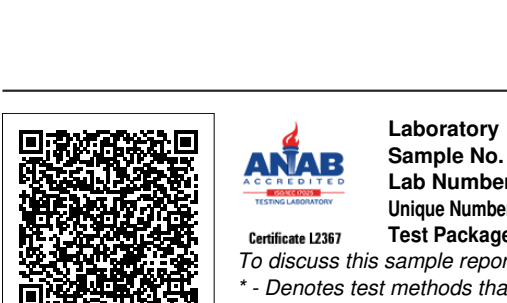
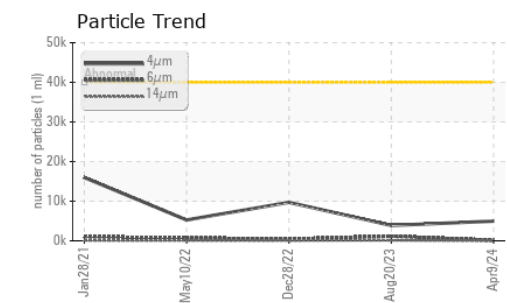
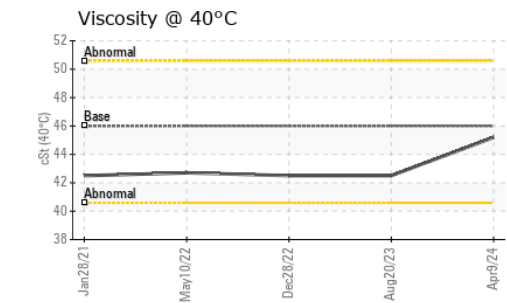
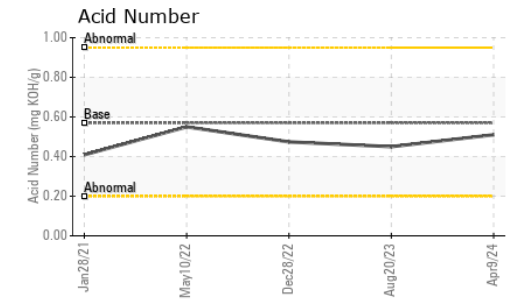
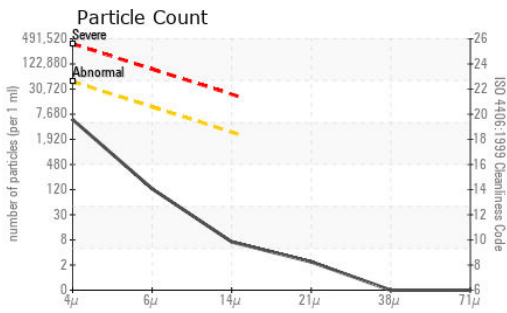
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	3	4	2
Potassium	ppm	ASTM D5185m	>20	1	0	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	4974	3882	9710
Particles >6µm		ASTM D7647	>10000	111	1143	424
Particles >14µm		ASTM D7647	>2500	6	102	18
Particles >21µm		ASTM D7647	>640	2	45	5
Particles >38µm		ASTM D7647	>160	0	2	1
Particles >71µm		ASTM D7647	>40	0	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	19/14/10	19/17/14	20/16/11
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	1	0
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	1	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	25	<1	2	<1
Calcium	ppm	ASTM D5185m	200	47	44	53
Phosphorus	ppm	ASTM D5185m	300	403	404	376
Zinc	ppm	ASTM D5185m	370	401	400	437
Sulfur	ppm	ASTM D5185m	2500	1094	1213	1381
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.51	0.45	0.474
Visc @ 40°C	cSt	ASTM D445	46	45.2	42.5	42.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0010491
Lab Number : 06147234
Unique Number : 10977312
Test Package : CONST

Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 Apr 2024 - Wes Davis

CARDINAL CIVIL
 4700 FALLS OF NEUSE RD, SUITE 370
 RALEIGH, NC
 US 27609
 Contact: Service Manager

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)

T: (919)324-1964

F: