



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery
Machine Id
VOLVO EC350E 350E310505
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- 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		ASC0007282	ASC0001289	VCP0006568
Sample Date		Client Info		22 Feb 2024	11 Sep 2023	16 May 2023
Machine Age	hrs	Client Info		7365	6702	6194
Oil Age	hrs	Client Info		1171	508	1081
Filter Age	hrs	Client Info		0	0	1081
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	13	10	15
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	3
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>150	11	14	22
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

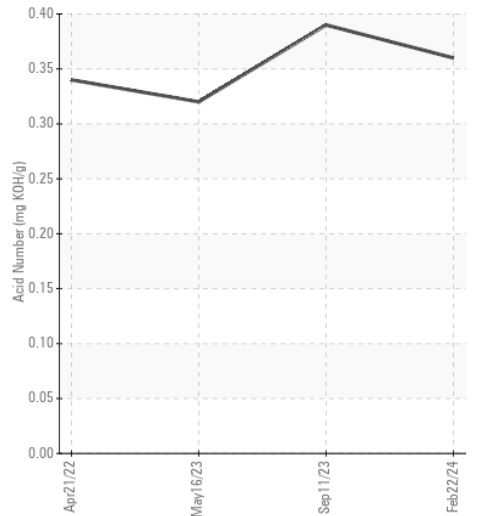
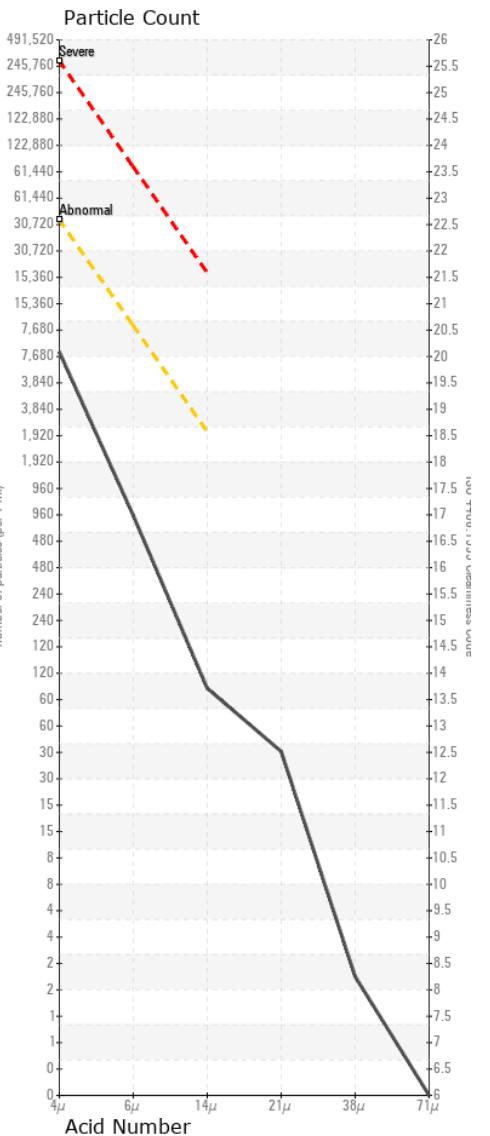
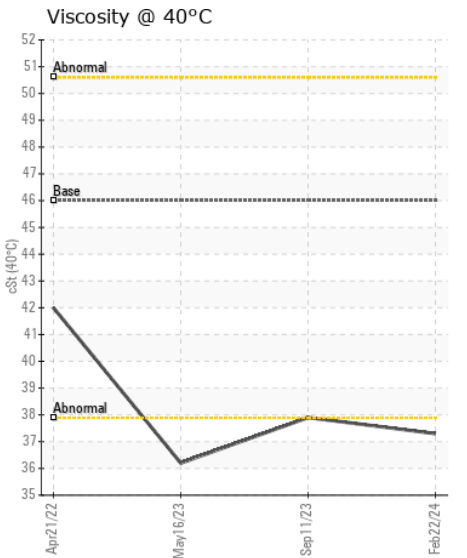
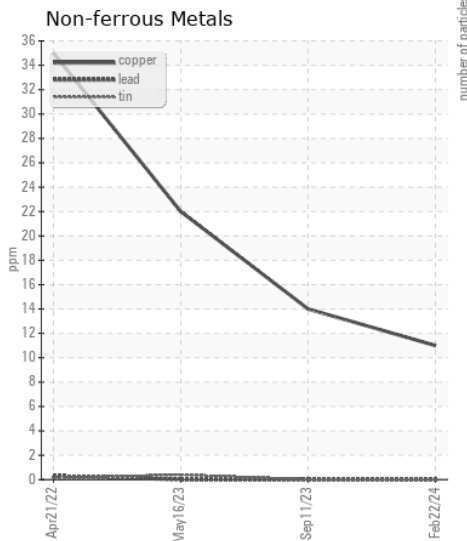
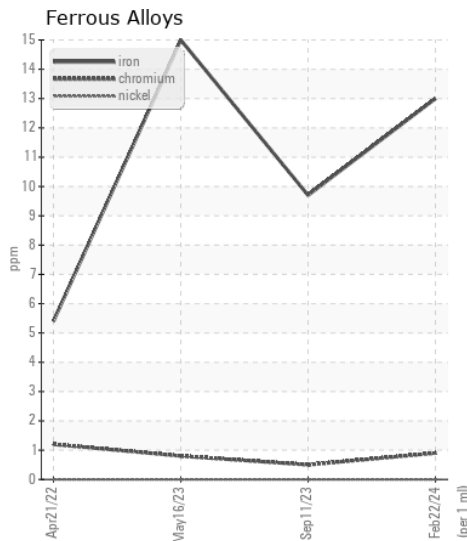
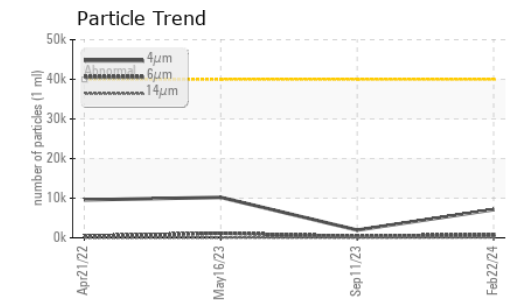
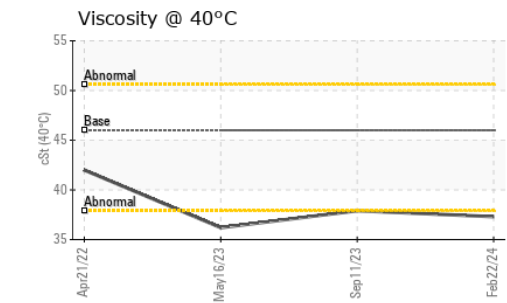
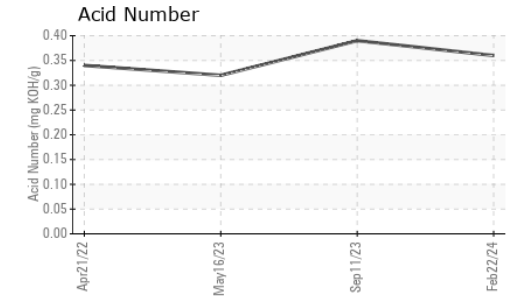
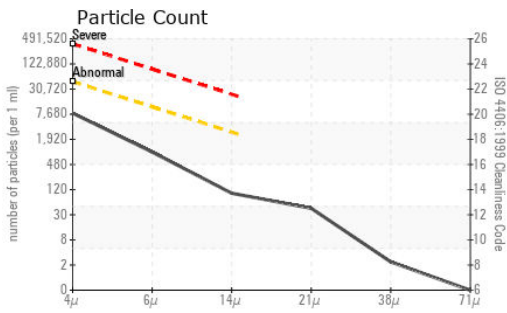
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	5	4	6
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	7111	1952	10209
Particles >6µm		ASTM D7647	>10000	835	364	1145
Particles >14µm		ASTM D7647	>2500	87	10	51
Particles >21µm		ASTM D7647	>640	38	1	13
Particles >38µm		ASTM D7647	>160	2	0	0
Particles >71µm		ASTM D7647	>40	0	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	20/17/14	18/16/10	21/17/13
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	1
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	0	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	7	0	8
Calcium	ppm	ASTM D5185m	49	49	23	32
Phosphorus	ppm	ASTM D5185m	354	322	318	312
Zinc	ppm	ASTM D5185m	419	355	342	341
Sulfur	ppm	ASTM D5185m	3719	1698	1906	1349
Acid Number (AN)	mg KOH/g	ASTM D8045		0.36	0.39	0.32
Visc @ 40°C	cSt	ASTM D445	46	37.3	37.9	36.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007282
Lab Number : 06099104
Unique Number : 10897334
Test Package : CONST

Received : 23 Feb 2024
Tested : 26 Feb 2024
Diagnosed : 26 Feb 2024 - Wes Davis

CAROLINA PRECISION GRADING
 7427 MATTHEWS MINT HILL ROAD
 CHARLOTTE, NC
 US 28227
 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)

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F: