



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Ascendum Machinery/500 Hour CSA
 Machine Id
VOLVO EC250E 2053 (S/N 250E310593)
 Component
Hydraulic System
 Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011448	VCP408840	VCP383020
Sample Date		Client Info		14 May 2024	01 Jun 2023	21 Feb 2023
Machine Age	hrs	Client Info		5977	4996	4531
Oil Age	hrs	Client Info		5977	953	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	26	20	7
Chromium	ppm	ASTM D5185m	>10	4	2	1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>20	1	<1	0
Copper	ppm	ASTM D5185m	>150	30	29	29
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

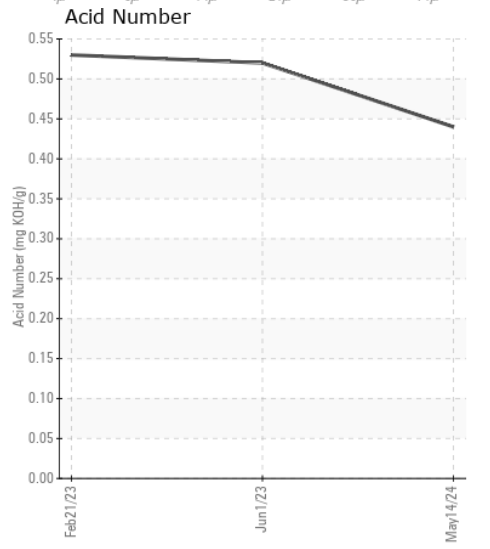
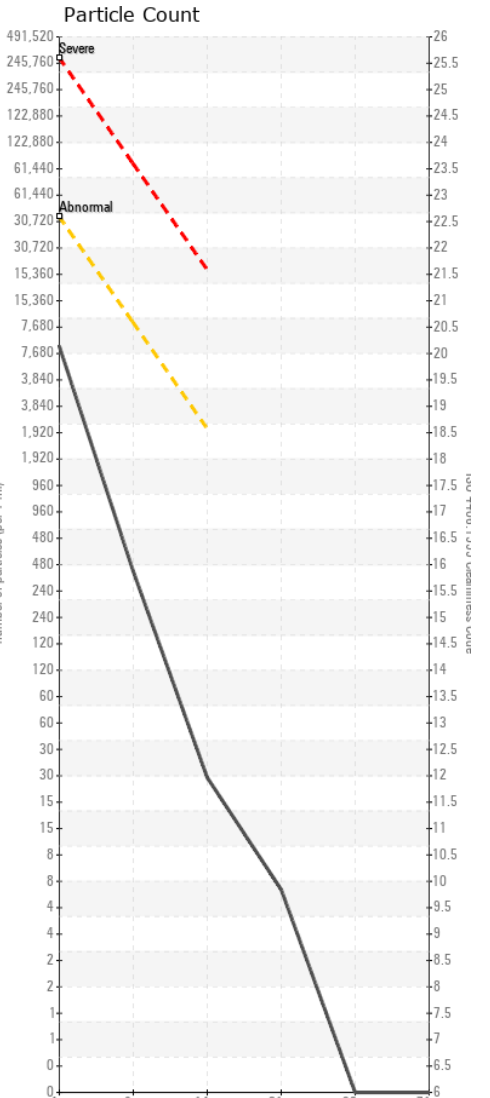
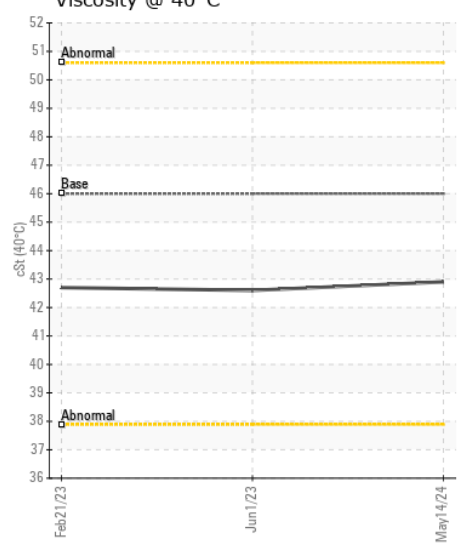
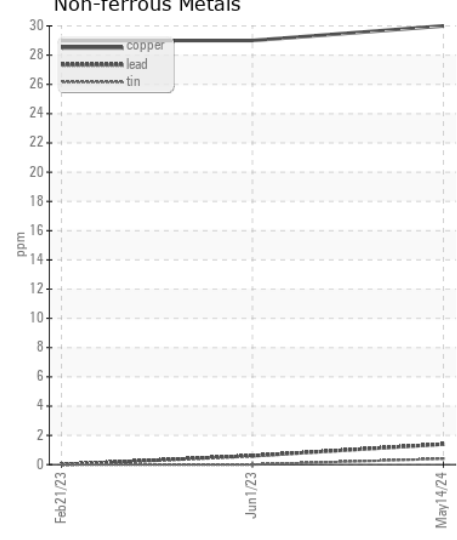
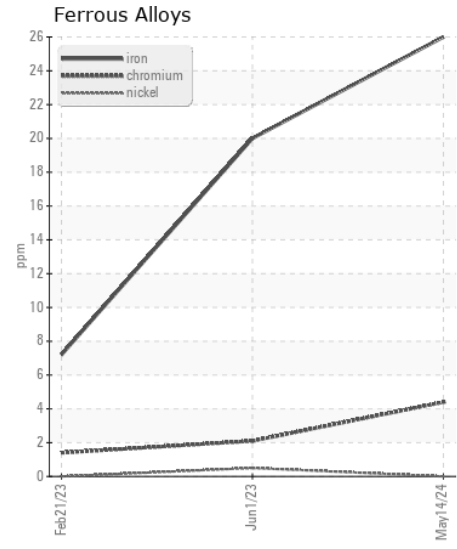
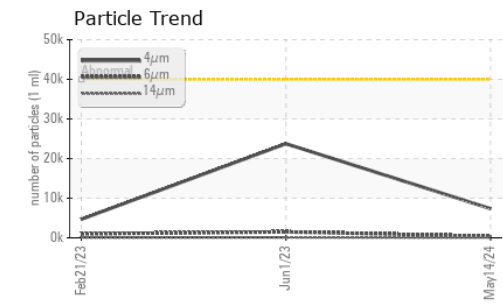
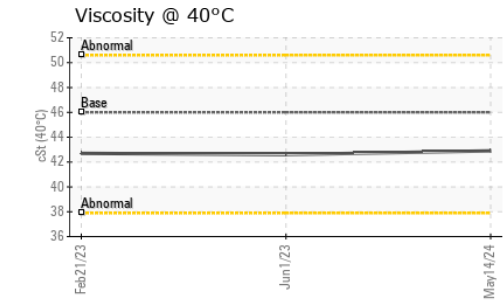
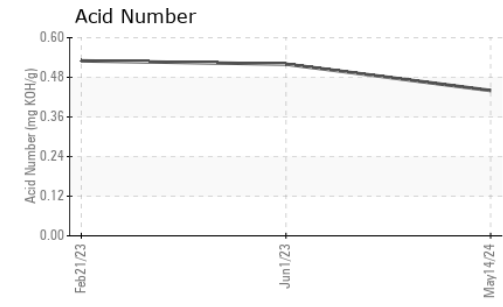
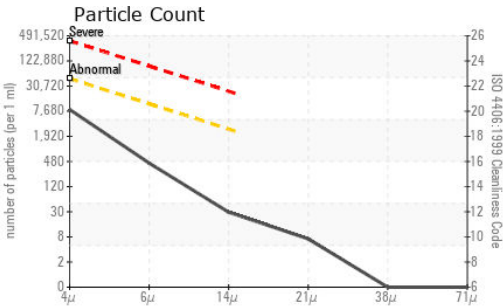
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	11	10	7
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	7346	23754	4683
Particles >6µm		ASTM D7647	>10000	386	1504	989
Particles >14µm		ASTM D7647	>2500	26	94	57
Particles >21µm		ASTM D7647	>640	6	35	10
Particles >38µm		ASTM D7647	>160	0	3	0
Particles >71µm		ASTM D7647	>40	0	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	20/16/12	22/18/14	19/17/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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		2	<1	2
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0.0	1	1	<1
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	83	85	87
Calcium	ppm	ASTM D5185m	49	177	167	173
Phosphorus	ppm	ASTM D5185m	354	443	412	449
Zinc	ppm	ASTM D5185m	419	526	541	565
Sulfur	ppm	ASTM D5185m	3719	1472	1249	1428
Acid Number (AN)	mg KOH/g	ASTM D8045		0.44	0.52	0.53
Visc @ 40°C	cSt	ASTM D445	46	42.9	42.6	42.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011448 **Received** : 29 May 2024
Lab Number : 06193899 **Tested** : 30 May 2024
Unique Number : 11056022 **Diagnosed** : 31 May 2024 - Angela Borella
Test Package : CONST

G S MATERIALS INC
 PO BOX 1335
 BURLINGTON, NC
 US 27216
 Contact: KAREN NEWPORT
 Gsmaterials@windstream.net
 T: (919)499-9322
 F: (919)499-2097

Certificate L2367
 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)