



Area  
**Ascendum Machinery/500 Hour CSA**  
 Machine Id  
**VOLVO EC350E 2130 (S/N 350E314011)**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0010331	ASC0010399	ASC0006171
Sample Date		Client Info		11 Jun 2024	20 Mar 2024	23 Jan 2024
Machine Age	hrs	Client Info		4498	4003	3532
Oil Age	hrs	Client Info		498	4000	532
Filter Age	hrs	Client Info		498	1000	532
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	19	12	6
Chromium	ppm	ASTM D5185m	>10	6	4	2
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		2	2	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	47	26	6
Lead	ppm	ASTM D5185m	>20	<1	2	0
Copper	ppm	ASTM D5185m	>150	15	16	12
Tin	ppm	ASTM D5185m	>10	0	3	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

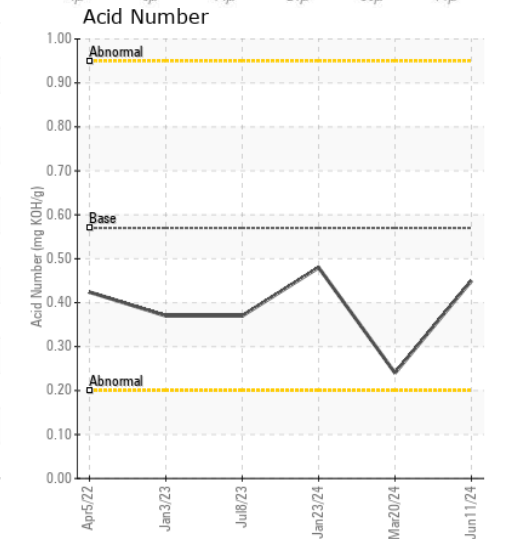
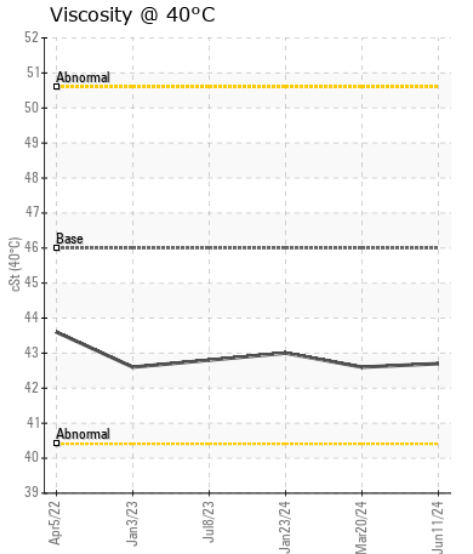
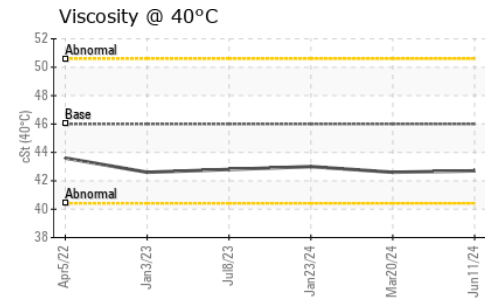
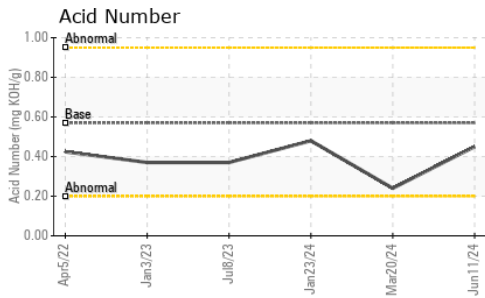
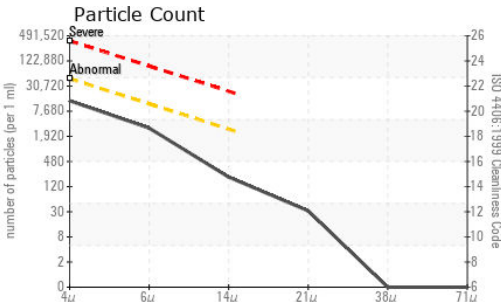
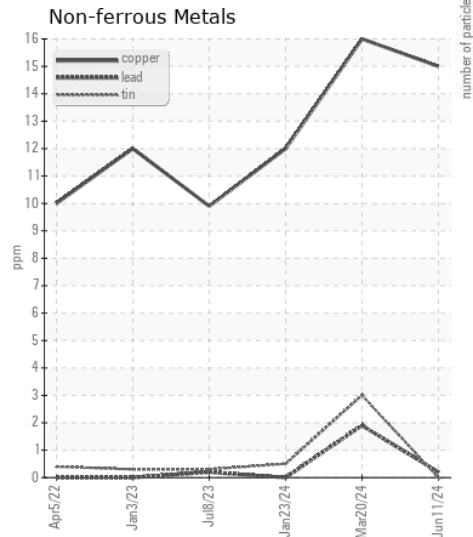
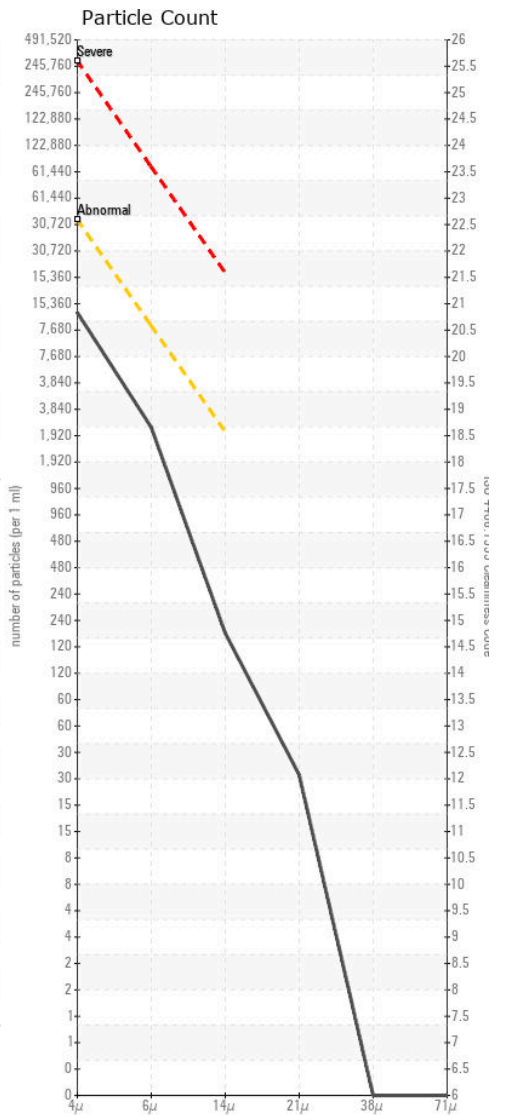
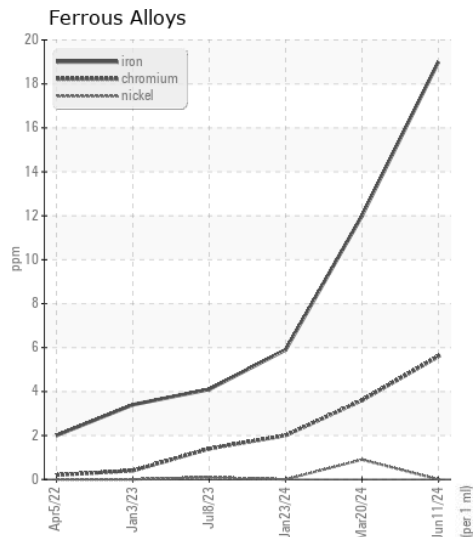
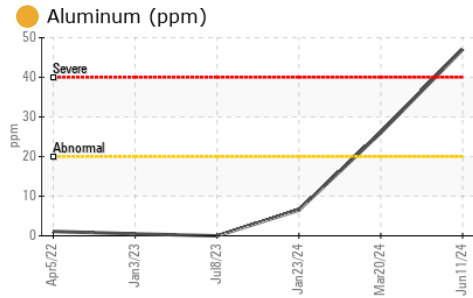
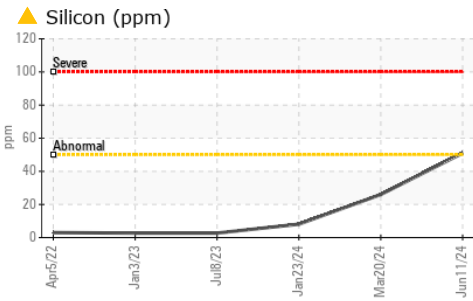
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>50	51	26	8
Potassium	ppm	ASTM D5185m	>20	1	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	11886	8757	6563
Particles >6µm		ASTM D7647	>10000	2643	699	1761
Particles >14µm		ASTM D7647	>2500	179	22	111
Particles >21µm		ASTM D7647	>640	28	4	22
Particles >38µm		ASTM D7647	>160	0	0	0
Particles >71µm		ASTM D7647	>40	0	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	21/19/15	20/17/12	20/18/14
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		1	2	1
Boron	ppm	ASTM D5185m	5	0	1	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	<1	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	25	22	17	25
Calcium	ppm	ASTM D5185m	200	106	86	86
Phosphorus	ppm	ASTM D5185m	300	360	297	328
Zinc	ppm	ASTM D5185m	370	452	360	391
Sulfur	ppm	ASTM D5185m	2500	1568	1261	1192
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.45	0.24	0.48
Visc @ 40°C	cSt	ASTM D445	46	42.7	42.6	43.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0010331 **Received** : 14 Jun 2024  
**Lab Number** : 06210028 **Tested** : 17 Jun 2024  
**Unique Number** : 11082892 **Diagnosed** : 17 Jun 2024 - Don Baldrige  
**Test Package** : CONST

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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)