



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**Ascendum Machinery/500 Hour CSA**  
Machine Id  
**VOLVO EC350E 2130 (S/N 314011)**  
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		<b>ASC0006171</b>	VCP418369	VCP0006115
Sample Date		Client Info		<b>23 Jan 2024</b>	08 Jul 2023	03 Jan 2023
Machine Age	hrs	Client Info		<b>3532</b>	2924	2041
Oil Age	hrs	Client Info		<b>532</b>	0	906
Filter Age	hrs	Client Info		<b>532</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	<b>6</b>	4	3
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>150	<b>12</b>	10	12
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

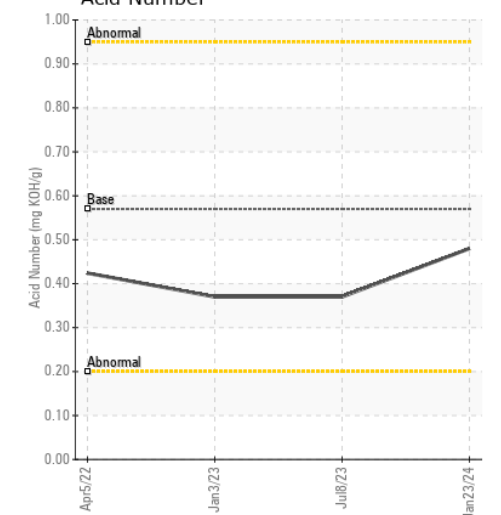
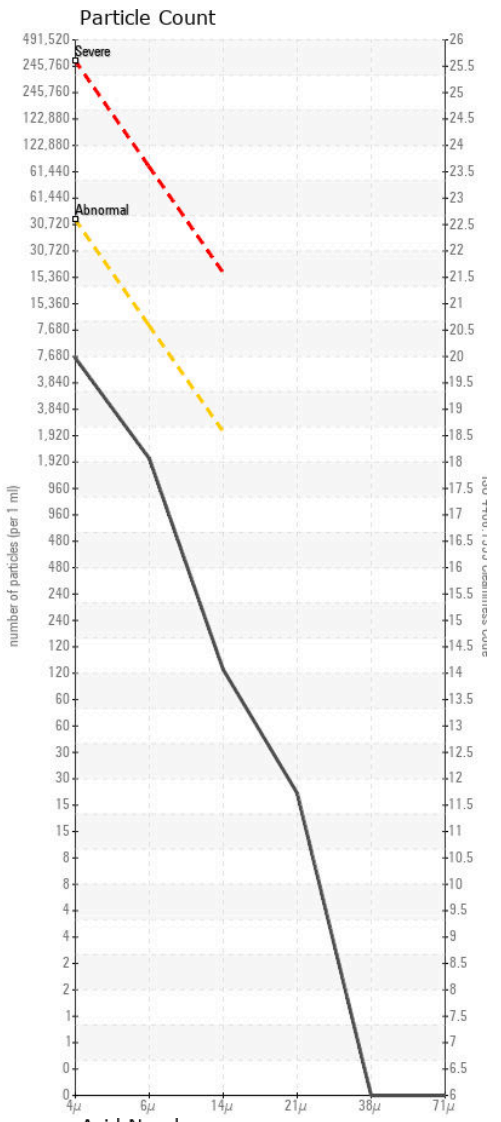
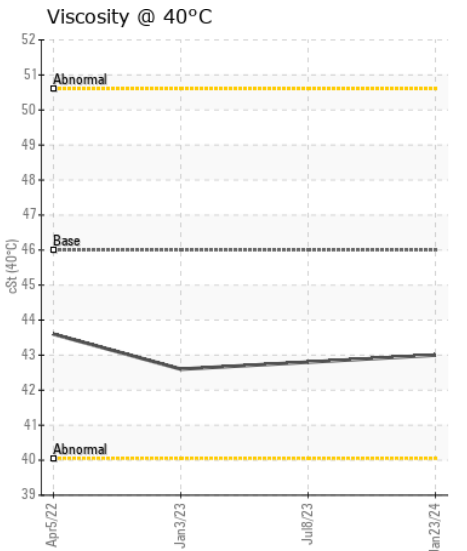
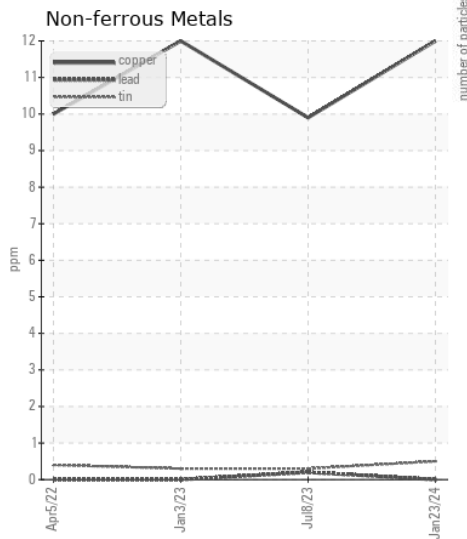
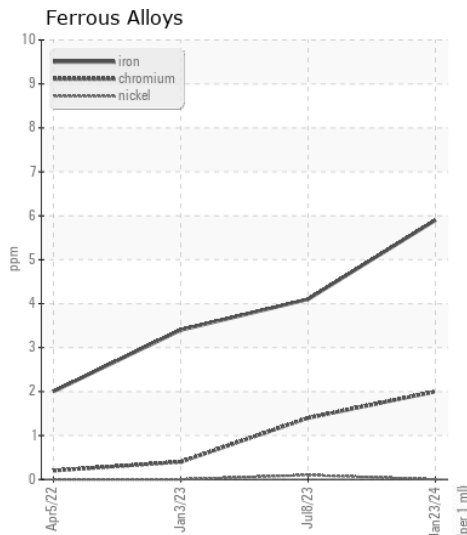
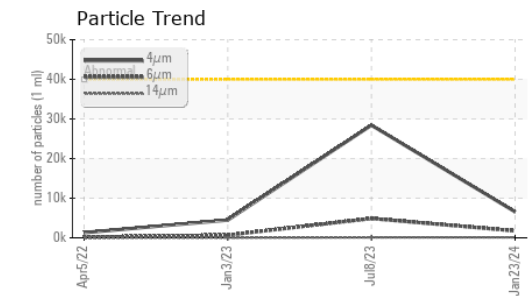
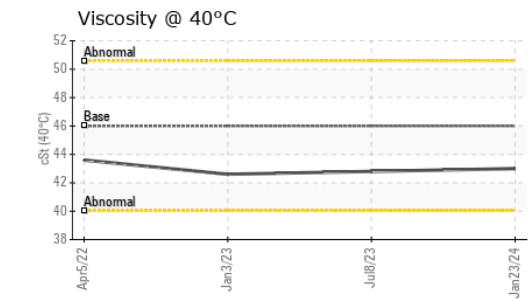
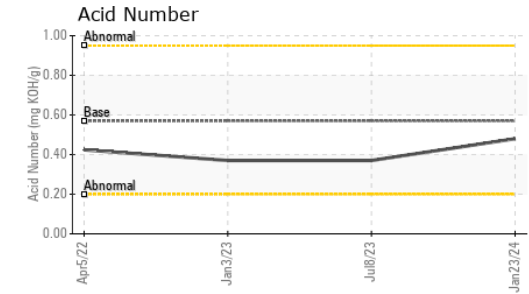
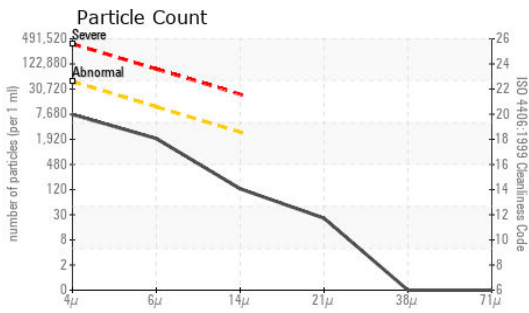
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	<b>8</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>40000	<b>6563</b>	28428	4475
Particles >6µm		ASTM D7647	>10000	<b>1761</b>	4877	681
Particles >14µm		ASTM D7647	>2500	<b>111</b>	106	22
Particles >21µm		ASTM D7647	>640	<b>22</b>	15	5
Particles >38µm		ASTM D7647	>160	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>40	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	<b>20/18/14</b>	22/19/14	19/17/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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		<b>1</b>	0	0
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	25	<b>25</b>	24	10
Calcium	ppm	ASTM D5185m	200	<b>86</b>	90	135
Phosphorus	ppm	ASTM D5185m	300	<b>328</b>	329	364
Zinc	ppm	ASTM D5185m	370	<b>391</b>	425	472
Sulfur	ppm	ASTM D5185m	2500	<b>1192</b>	1336	1669
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.48</b>	0.37	0.37
Visc @ 40°C	cSt	ASTM D445	46	<b>43.0</b>	42.8	42.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0006171 **Received** : 31 Jan 2024  
**Lab Number** : 06075644 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 10857735 **Diagnostician** : Wes Davis  
**Test Package** : CONST

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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