



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**Ascendum Machinery 500HR CSA/Princeton, NC**  
Machine Id  
**VOLVO EC350E 2187 (S/N 314235)**  
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		ASC0006395	VCP432842	VCP407553
Sample Date		Client Info		08 Jan 2024	27 Sep 2023	11 Jul 2023
Machine Age	hrs	Client Info		4955	4731	4118
Oil Age	hrs	Client Info		955	613	0
Filter Age	hrs	Client Info		955	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	9	8	13
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	6	6
Lead	ppm	ASTM D5185m	>20	<1	<1	<1
Copper	ppm	ASTM D5185m	>150	24	21	41
Tin	ppm	ASTM D5185m	>10	<1	<1	<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

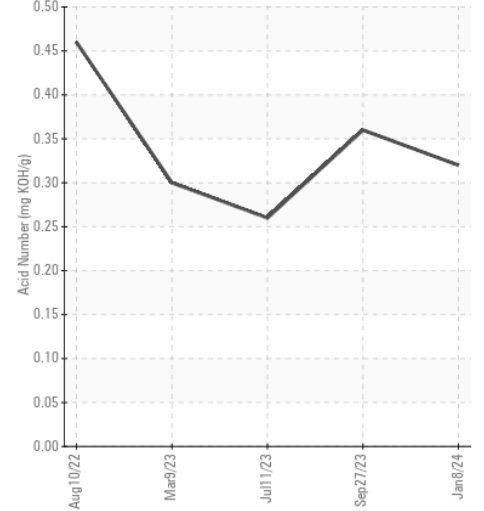
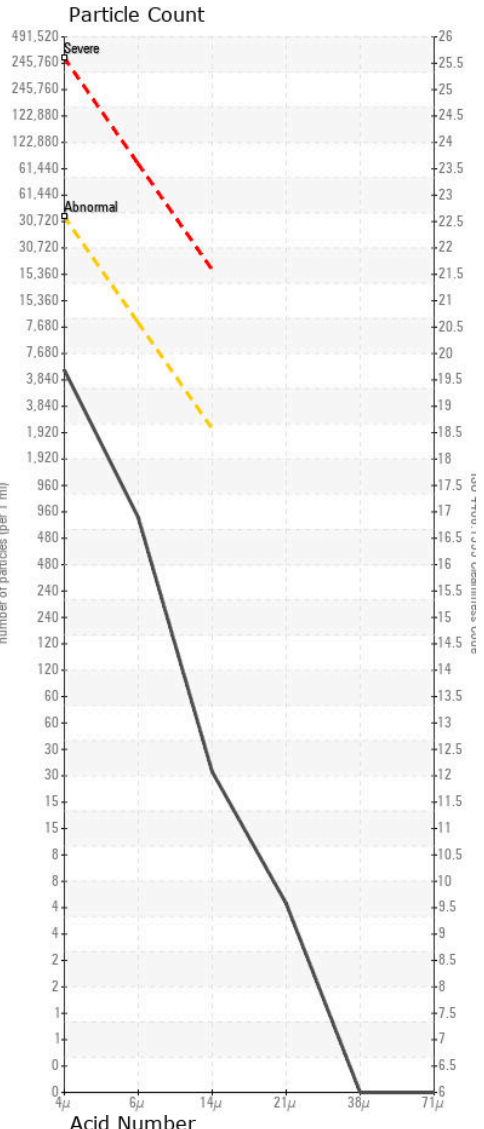
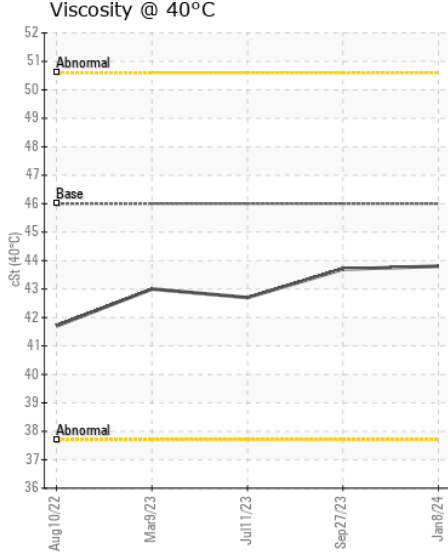
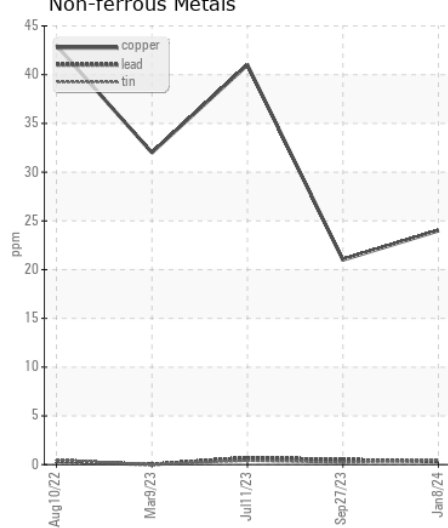
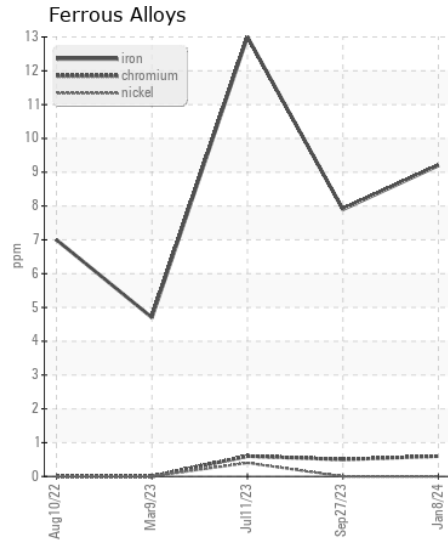
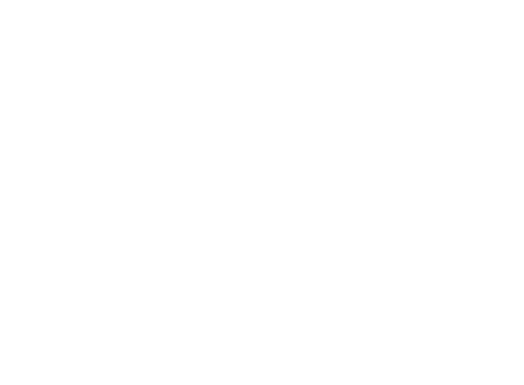
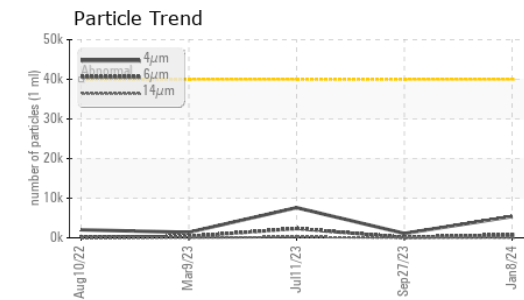
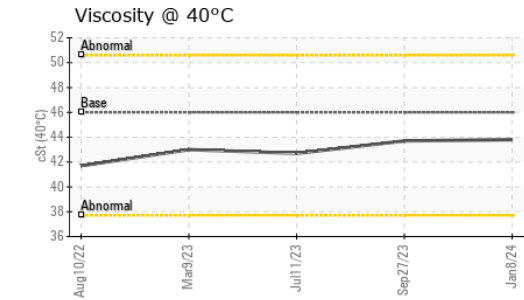
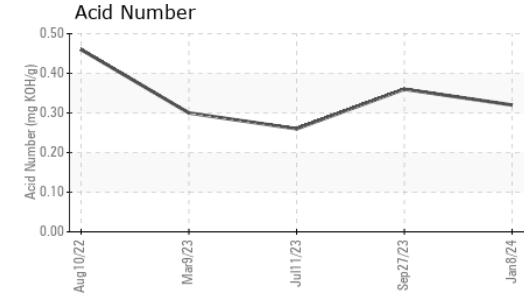
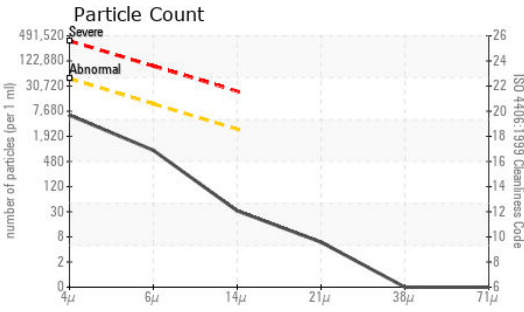
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	11	9	10
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	5383	1102	7616
Particles >6µm		ASTM D7647	>10000	780	87	2333
Particles >14µm		ASTM D7647	>2500	28	6	205
Particles >21µm		ASTM D7647	>640	5	2	43
Particles >38µm		ASTM D7647	>160	0	0	1
Particles >71µm		ASTM D7647	>40	0	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	20/17/12	17/14/10	20/18/15
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	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<1	0	<1
Manganese	ppm	ASTM D5185m	0.0	0	0	0
Magnesium	ppm	ASTM D5185m	2.6	2	2	6
Calcium	ppm	ASTM D5185m	49	44	47	67
Phosphorus	ppm	ASTM D5185m	354	308	286	319
Zinc	ppm	ASTM D5185m	419	321	374	349
Sulfur	ppm	ASTM D5185m	3719	883	872	1034
Acid Number (AN)	mg KOH/g	ASTM D8045		0.32	0.36	0.26
Visc @ 40°C	cSt	ASTM D445	46	43.8	43.7	42.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0006395 **Received** : 11 Jan 2024  
**Lab Number** : 06058003 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829385 **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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