



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area  
**Ascendum Machinery**  
 Machine Id  
**VOLVO EC250E EX-10 (S/N 314019)**  
 Component  
**Hydraulic System**  
 Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (55 GAL)**

### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0008486	ASC0005206	ASC0001096
Sample Date		Client Info		01 Jul 2024	21 Nov 2023	15 Aug 2023
Machine Age	hrs	Client Info		3493	3000	2539
Oil Age	hrs	Client Info		2544	949	488
Filter Age	hrs	Client Info		0	949	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	9	8	8
Chromium	ppm	ASTM D5185m	>10	2	2	2
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	<1
Lead	ppm	ASTM D5185m	>20	<1	<1	<1
Copper	ppm	ASTM D5185m	>150	32	27	25
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

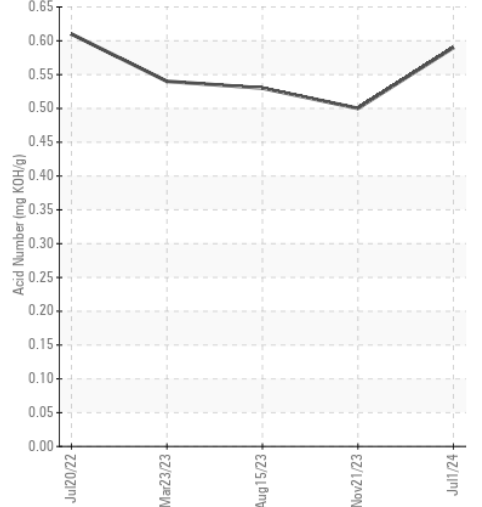
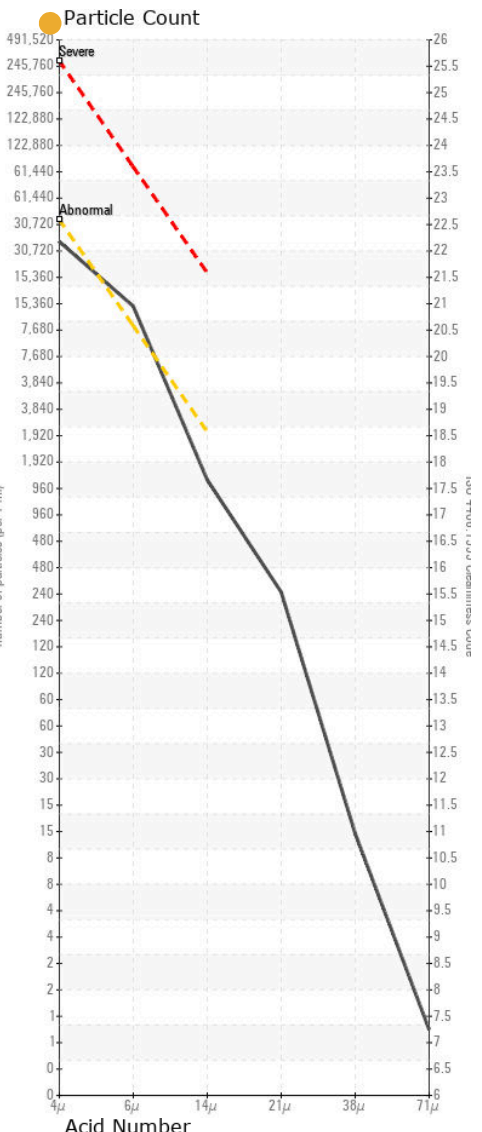
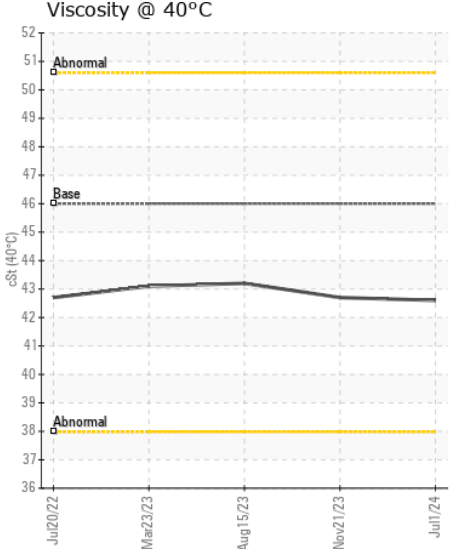
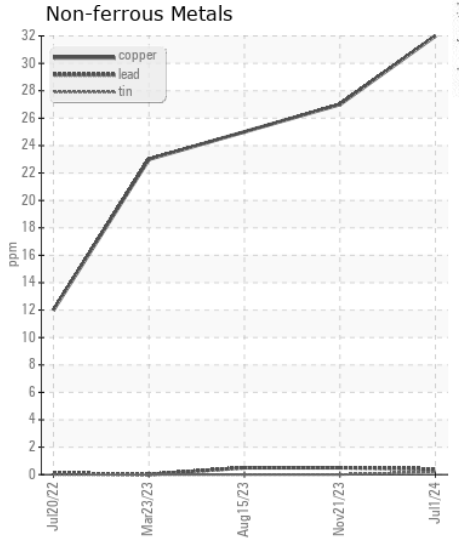
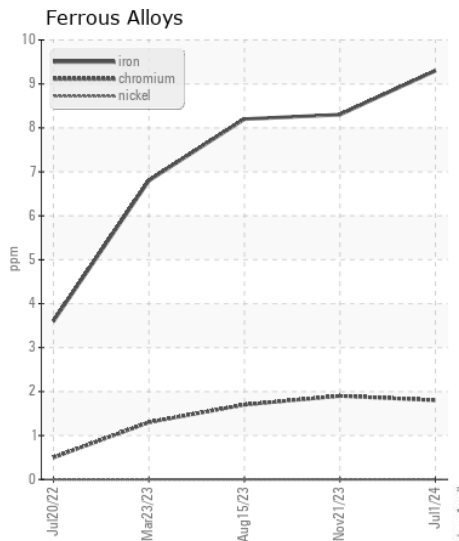
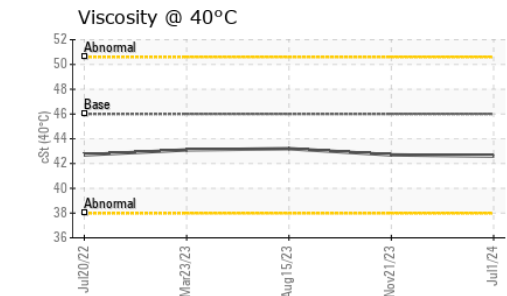
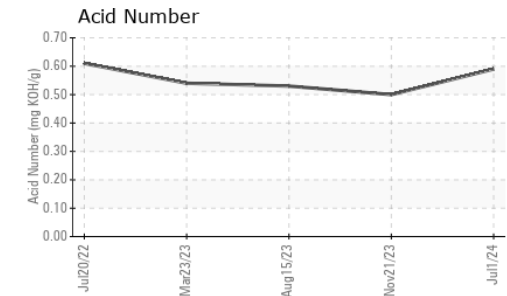
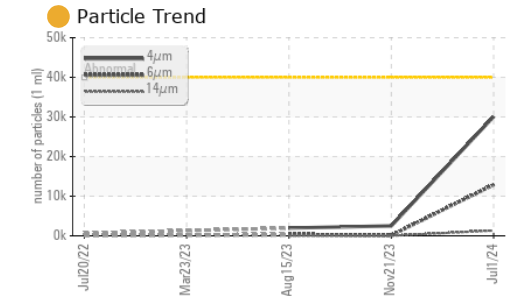
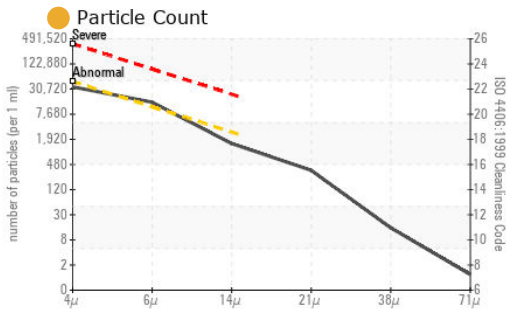
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>50	5	5	5
Potassium	ppm	ASTM D5185m	>20	2	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	30080	2505	1955
Particles >6µm		ASTM D7647	>10000	12896	118	360
Particles >14µm		ASTM D7647	>2500	1331	10	38
Particles >21µm		ASTM D7647	>640	306	2	11
Particles >38µm		ASTM D7647	>160	13	0	0
Particles >71µm		ASTM D7647	>40	1	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	22/21/18	19/14/10	18/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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	0	0
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	0	<1
Molybdenum	ppm	ASTM D5185m	0.0	<1	<1	<1
Manganese	ppm	ASTM D5185m	0.0	0	0	<1
Magnesium	ppm	ASTM D5185m	2.6	3	2	2
Calcium	ppm	ASTM D5185m	49	461	443	385
Phosphorus	ppm	ASTM D5185m	354	461	493	446
Zinc	ppm	ASTM D5185m	419	594	585	567
Sulfur	ppm	ASTM D5185m	3719	1431	1392	1454
Acid Number (AN)	mg KOH/g	ASTM D8045		0.59	0.50	0.53
Visc @ 40°C	cSt	ASTM D445	46	42.6	42.7	43.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0008486 **Received** : 18 Jul 2024  
**Lab Number** : 06240250 **Tested** : 19 Jul 2024  
**Unique Number** : 11129084 **Diagnosed** : 19 Jul 2024 - Wes Davis  
**Test Package** : CONST

**CAROLINA EXCAVATING**  
 1036 BRANCHVIEW DR, SUITE 106  
 CONCORD, NC  
 US 28025  
 Contact: KEVIN LADGERWOOD  
 kevin@carlinaexcavation.com  
 T:  
 F:

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)