



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

### Ascendum Machinery

Machine Id

### VOLVO EC220E 316270

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		ASC0008478	---	---
Sample Date		Client Info		02 Jul 2024	---	---
Machine Age	hrs	Client Info		568	---	---
Oil Age	hrs	Client Info		568	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

#### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	0	---	---
Chromium	ppm	ASTM D5185m	>10	0	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>20	0	---	---
Lead	ppm	ASTM D5185m	>20	0	---	---
Copper	ppm	ASTM D5185m	>150	20	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

#### CONTAMINATION

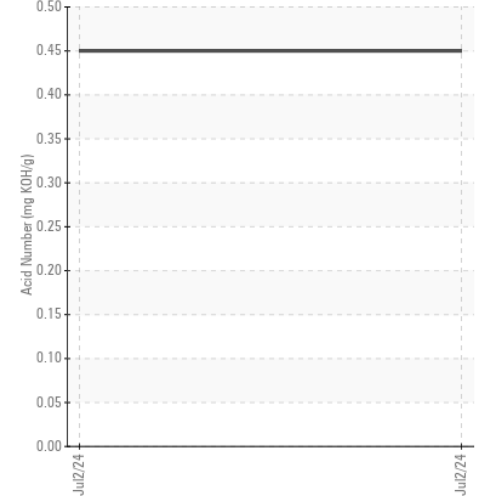
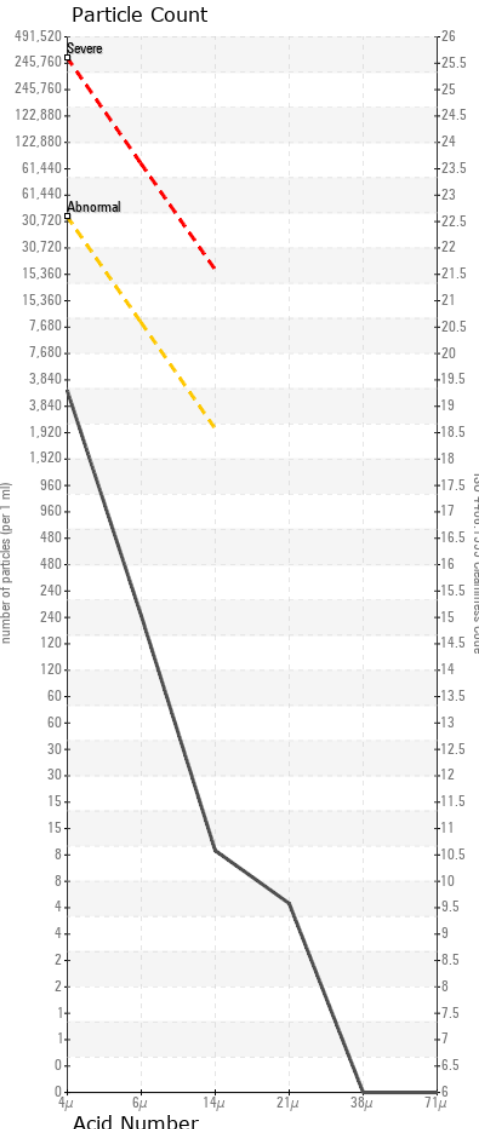
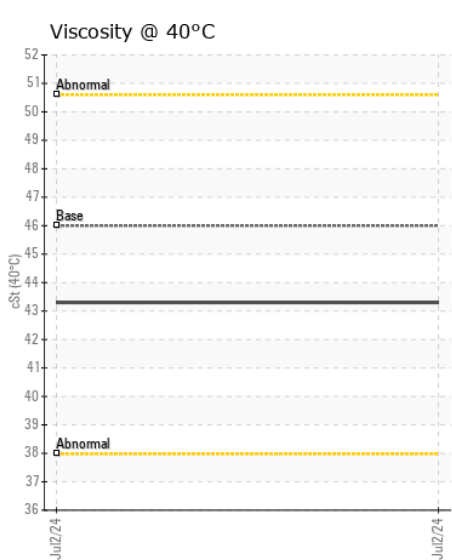
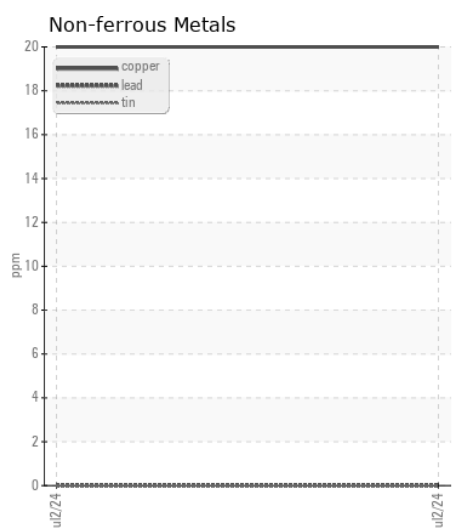
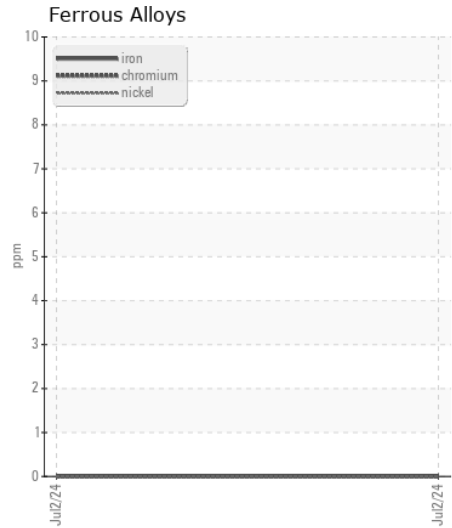
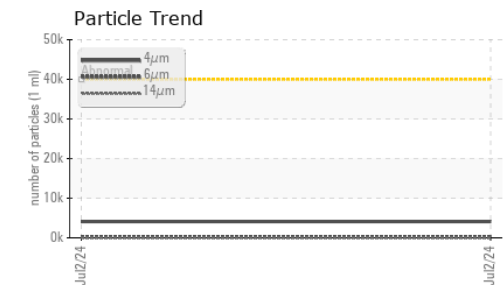
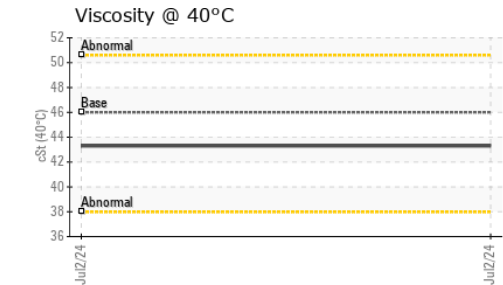
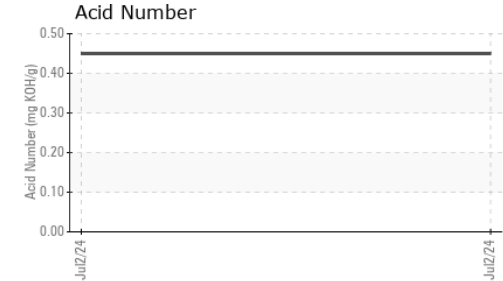
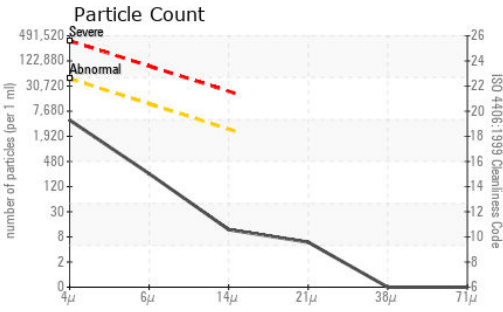
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	3	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>40000	4105	---	---
Particles >6µm		ASTM D7647	>10000	216	---	---
Particles >14µm		ASTM D7647	>2500	10	---	---
Particles >21µm		ASTM D7647	>640	5	---	---
Particles >38µm		ASTM D7647	>160	0	---	---
Particles >71µm		ASTM D7647	>40	0	---	---
Oil Cleanliness		ISO 4406 (c)	>22/20/18	19/15/10	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	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		1	---	---
Boron	ppm	ASTM D5185m	14	0	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	0.0	0	---	---
Manganese	ppm	ASTM D5185m	0.0	<1	---	---
Magnesium	ppm	ASTM D5185m	2.6	<1	---	---
Calcium	ppm	ASTM D5185m	49	79	---	---
Phosphorus	ppm	ASTM D5185m	354	425	---	---
Zinc	ppm	ASTM D5185m	419	542	---	---
Sulfur	ppm	ASTM D5185m	3719	1210	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.45	---	---
Visc @ 40°C	cSt	ASTM D445	46	43.3	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0008478  
**Lab Number** : 06228466  
**Unique Number** : 11111959  
**Test Package** : CONST

**CHURCHILL CONTRACTING LLC**  
 4101 STUART ANDREW BLVD SUITE A  
 CHARLOTTE, NC  
 US 28097  
 Contact: Service Manager

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)

T:  
F: