



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**Blythe Construction CSA - Charlotte**  
Machine Id  
**VOLVO EC250E 3004996 (S/N 250E310486)**  
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		<b>ASC0000959</b>	ASC0000112	VCP0007187
Sample Date		Client Info		<b>08 Dec 2023</b>	05 Jun 2023	19 Jan 2023
Machine Age		Client Info		<b>6432</b>	5993	5500
Oil Age		Client Info		<b>439</b>	2000	1421
Filter Age		Client Info		<b>0</b>	2000	1421
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	<b>6</b>	6	6
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	<1	2
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>150	<b>29</b>	27	23
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

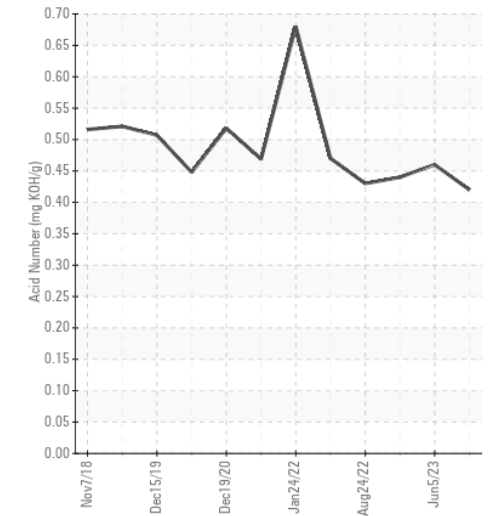
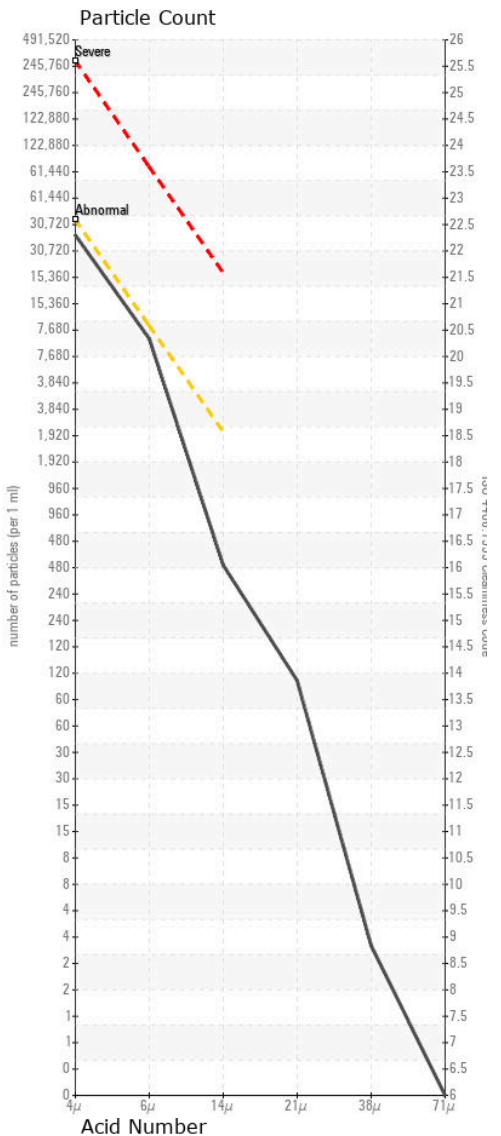
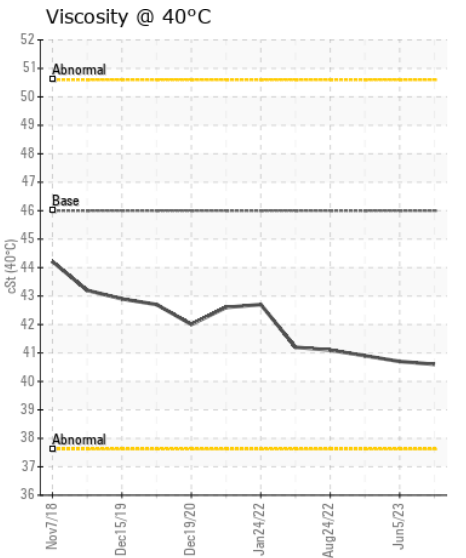
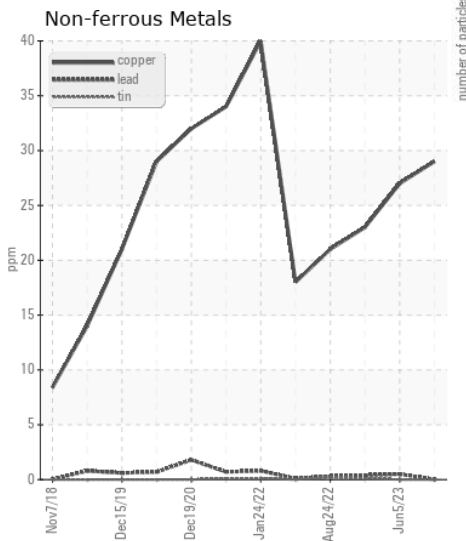
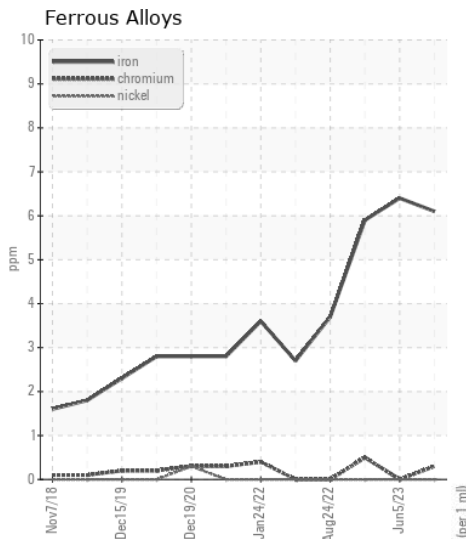
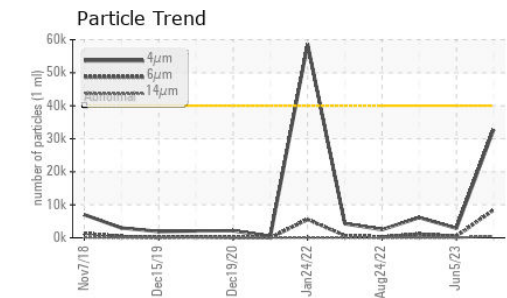
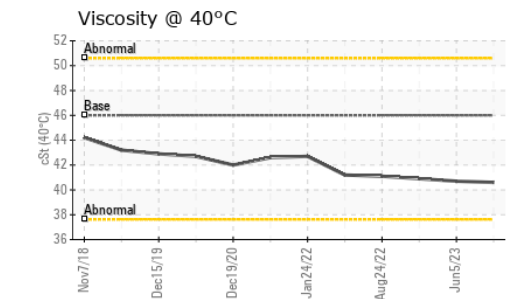
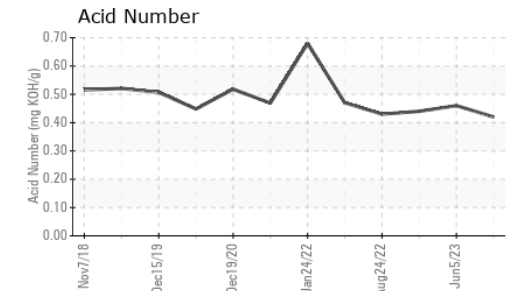
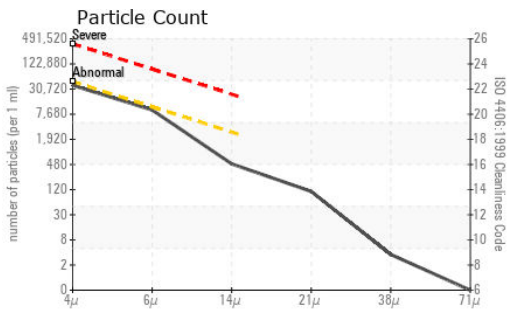
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	<b>5</b>	4	4
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>32741</b>	2881	6140
Particles >6µm		ASTM D7647	>10000	<b>8444</b>	444	1131
Particles >14µm		ASTM D7647	>2500	<b>436</b>	38	42
Particles >21µm		ASTM D7647	>640	<b>96</b>	15	6
Particles >38µm		ASTM D7647	>160	<b>3</b>	1	0
Particles >71µm		ASTM D7647	>40	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	<b>22/20/16</b>	19/16/12	20/17/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	VLITE
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>2</b>	0	0
Boron	ppm	ASTM D5185m	14	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	2.6	<b>0</b>	1	<1
Calcium	ppm	ASTM D5185m	49	<b>52</b>	52	56
Phosphorus	ppm	ASTM D5185m	354	<b>359</b>	343	334
Zinc	ppm	ASTM D5185m	419	<b>394</b>	421	401
Sulfur	ppm	ASTM D5185m	3719	<b>1396</b>	1590	1384
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.42</b>	0.46	0.44
Visc @ 40°C	cSt	ASTM D445	46	<b>40.6</b>	40.7	40.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0000959  
**Lab Number** : 06037742  
**Unique Number** : 10792971  
**Test Package** : MOBCE

**Received** : 18 Dec 2023  
**Tested** : 19 Dec 2023  
**Diagnosed** : 19 Dec 2023 - Wes Davis

**BLYTHE CONSTRUCTION INC**  
 2911 N GRAHAM STREET  
 CHARLOTTE, NC  
 US 28231  
 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)

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