



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area  
**Blythe & Zachary JV CSA - I85 SC**  
Machine Id  
**VOLVO L60H 3104723 (S/N L60HV621582)**  
Component  
**Hydraulic System**  
Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

### RECOMMENDATION

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0003454	VCP425157	VCP311871
Sample Date		Client Info		27 Oct 2023	28 Sep 2023	06 Sep 2022
Machine Age		Client Info		5484	4975	0
Oil Age		Client Info		1484	0	0
Filter Age		Client Info		1484	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	Changed
Sample Status				SEVERE	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	8	1	4
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	1	3
Lead	ppm	ASTM D5185m	>20	5	<1	3
Copper	ppm	ASTM D5185m	>150	5	1	4
Tin	ppm	ASTM D5185m	>20	<1	0	<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

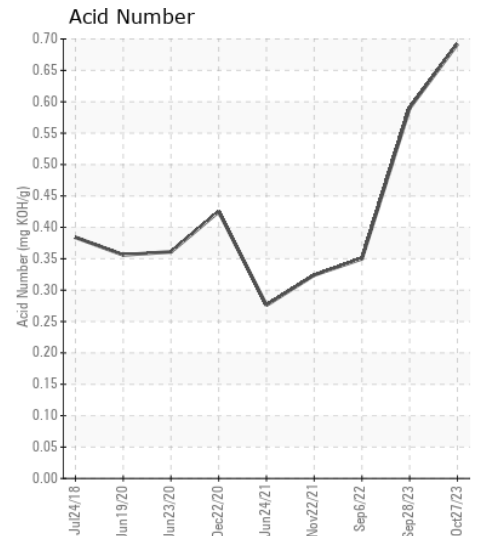
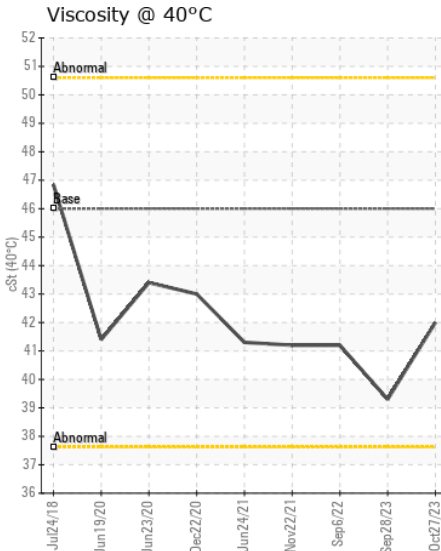
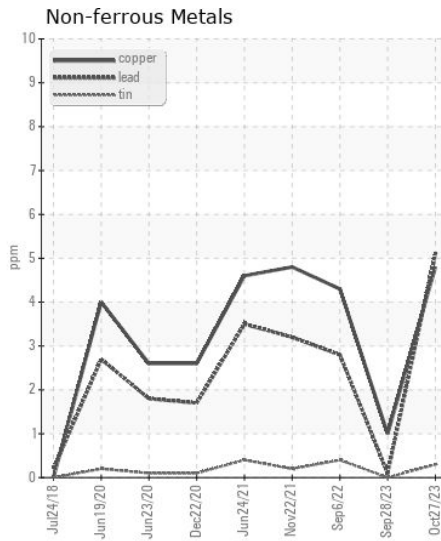
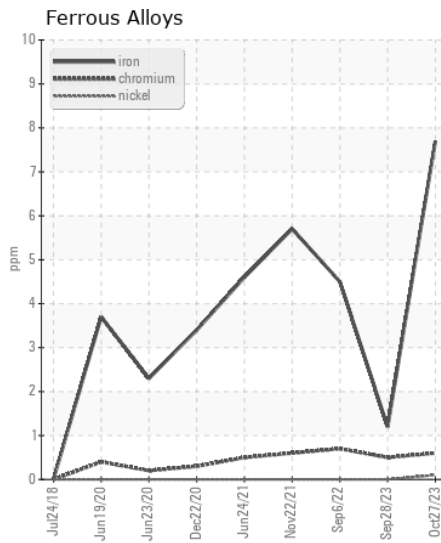
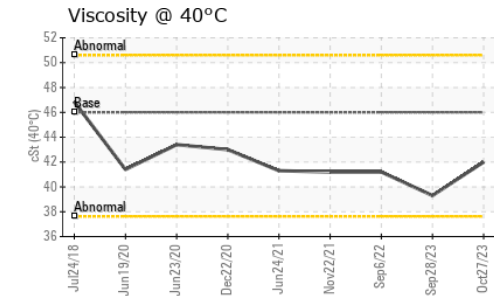
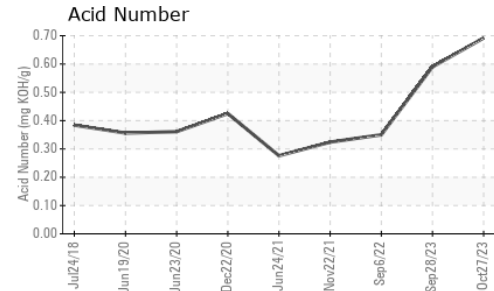
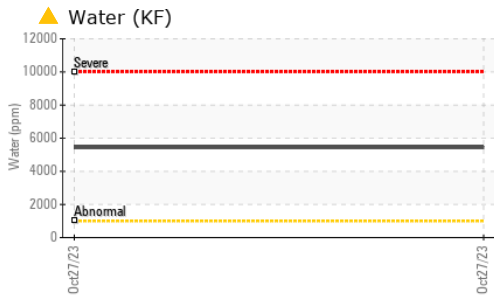
Appearance is milky. There is a moderate concentration of water present in the oil. Excessive free water present.

Silicon	ppm	ASTM D5185m	>20	5	2	3
Potassium	ppm	ASTM D5185m	>20	<1	0	2
Water	%	ASTM D6304	>0.1	▲ 0.544	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 5440	---	---
Particles >4µm		ASTM D7647		---	---	3966
Particles >6µm		ASTM D7647	>2500	---	---	293
Particles >14µm		ASTM D7647	>80	---	---	19
Particles >21µm		ASTM D7647	>20	---	---	7
Particles >38µm		ASTM D7647	>4	---	---	1
Particles >71µm		ASTM D7647	>3	---	---	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	---	---	19/15/11
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	● MILKY	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	▲ 0.2%	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<1	2	0
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	0	0
Manganese	ppm	ASTM D5185m	0.0	0	0	0
Magnesium	ppm	ASTM D5185m	2.6	<1	3	<1
Calcium	ppm	ASTM D5185m	49	46	54	51
Phosphorus	ppm	ASTM D5185m	354	347	330	314
Zinc	ppm	ASTM D5185m	419	417	451	414
Sulfur	ppm	ASTM D5185m	3719	4086	2968	4563
Acid Number (AN)	mg KOH/g	ASTM D8045		0.692	0.59	0.35
Visc @ 40°C	cSt	ASTM D445	46	42.0	39.3	41.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0003454 **Received** : 30 Oct 2023  
**Lab Number** : 05992794 **Tested** : 31 Oct 2023  
**Unique Number** : 10715456 **Diagnosed** : 31 Oct 2023 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: KF )

**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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