



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**Ascendum Machinery/500 Hour CSA**  
Machine Id  
**VOLVO L70H 2189 (S/N 624435)**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0005163	VCP382653	VCP386833
Sample Date		Client Info		29 Nov 2023	06 Feb 2023	29 Jul 2022
Machine Age	hrs	Client Info		1976	1472	1133
Oil Age	hrs	Client Info		1976	0	0
Filter Age	hrs	Client Info		1976	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	ATTENTION

### WEAR

All component wear rates are normal.

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

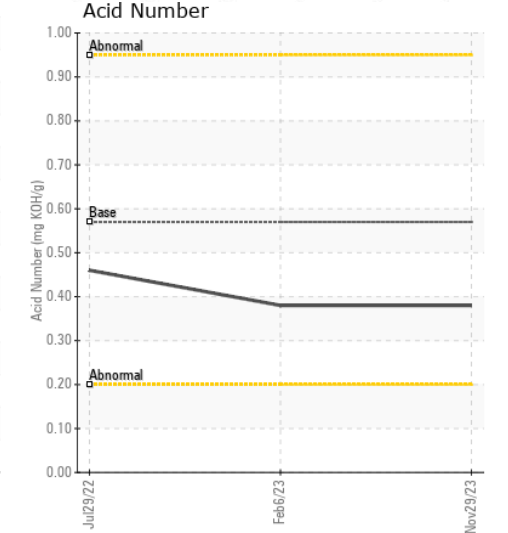
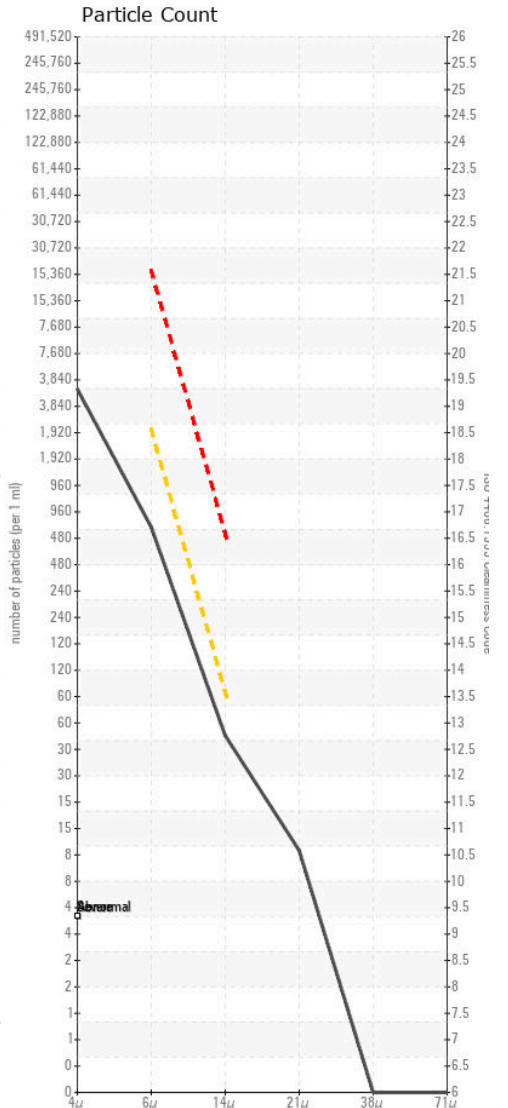
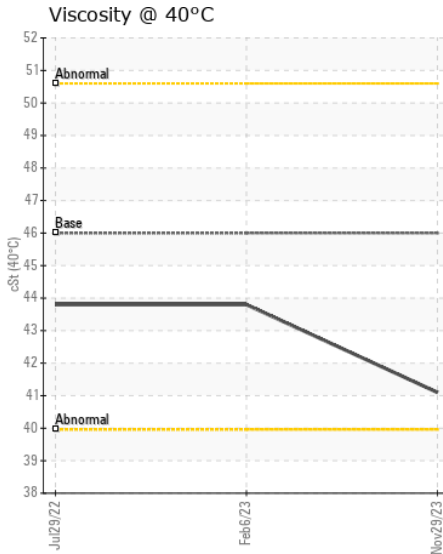
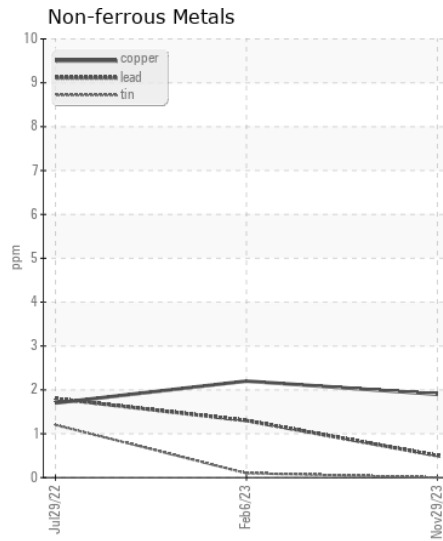
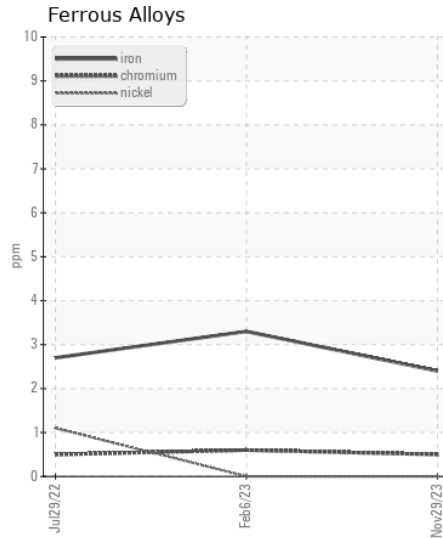
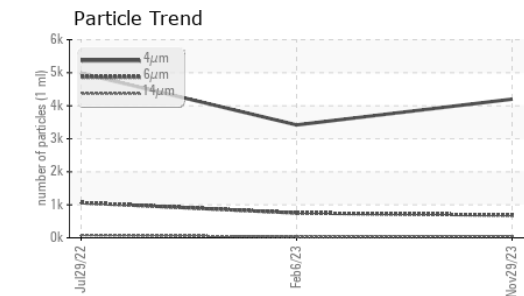
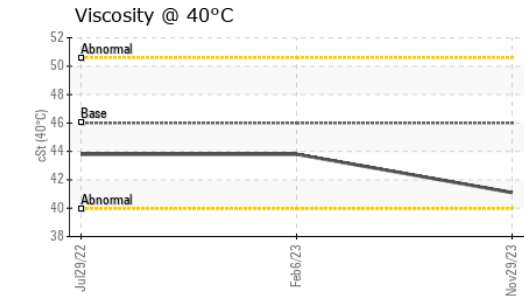
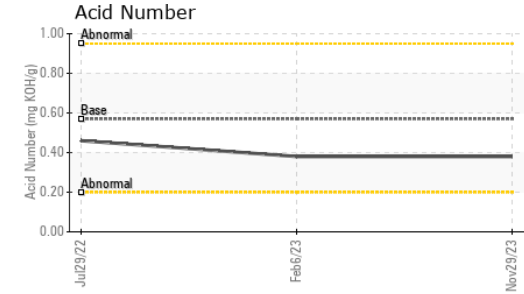
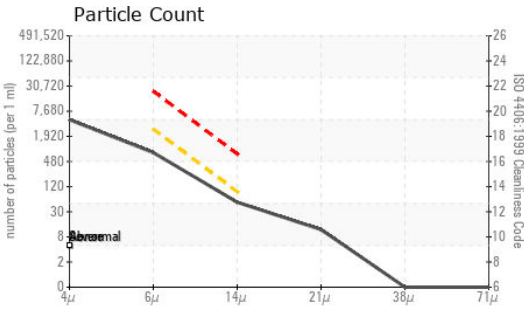
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	3	4	3
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		4199	3419	4986
Particles >6µm		ASTM D7647	>2500	688	752	1063
Particles >14µm		ASTM D7647	>80	45	32	▲ 83
Particles >21µm		ASTM D7647	>20	10	2	▲ 22
Particles >38µm		ASTM D7647	>4	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/17/13	19/17/12	▲ 19/17/14
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		1	<1	<1
Boron	ppm	ASTM D5185m	5	0	0	1
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	<1	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	2	3	3
Calcium	ppm	ASTM D5185m	200	58	67	65
Phosphorus	ppm	ASTM D5185m	300	293	341	347
Zinc	ppm	ASTM D5185m	370	410	428	431
Sulfur	ppm	ASTM D5185m	2500	1551	2238	2534
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.38	0.38	0.46
Visc @ 40°C	cSt	ASTM D445	46	41.1	43.8	43.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0005163 **Received** : 09 Jan 2024  
**Lab Number** : 06055341 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821290 **Diagnostician** : Wes Davis  
**Test Package** : CONST

**TRIANGLE GRADING AND PAVING INC**  
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 US 27216  
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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)