



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**Ascendum Machinery/500 Hour CSA**  
Machine Id  
**VOLVO L70H 2185 (S/N 624437)**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007945	VCP420370	VCP398193
Sample Date		Client Info		08 Feb 2024	31 May 2023	12 Jan 2023
Machine Age	hrs	Client Info		1922	1445	1124
Oil Age	hrs	Client Info		1922	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	N/A	Not Changed
Filter Changed		Client Info		Changed	N/A	Not Changed
Sample Status				NORMAL	ABNORMAL	ATTENTION

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	7	4	3
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	<1
Lead	ppm	ASTM D5185m	>20	4	2	1
Copper	ppm	ASTM D5185m	>150	4	2	2
Tin	ppm	ASTM D5185m	>20	<1	0	0
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 amount and size of particulates present in the system is acceptable. There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>20	6	4	4
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		3893	22681	▲ 9478
Particles >6µm		ASTM D7647	>2500	300	▲ 6113	▲ 2321
Particles >14µm		ASTM D7647	>80	16	▲ 435	124
Particles >21µm		ASTM D7647	>20	5	▲ 124	29
Particles >38µm		ASTM D7647	>4	0	▲ 8	1
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/15/11	▲ 22/20/16	▲ 20/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	VLITE
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	<1	<1
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	13	0	0
Molybdenum	ppm	ASTM D5185m	5	2	<1	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	25	5	4	2
Calcium	ppm	ASTM D5185m	200	93	62	62
Phosphorus	ppm	ASTM D5185m	300	541	329	351
Zinc	ppm	ASTM D5185m	370	669	459	444
Sulfur	ppm	ASTM D5185m	2500	3673	2233	2460
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.19	0.36	0.34
Visc @ 40°C	cSt	ASTM D445	46	43.4	43.8	44.0

