



# ASCENDUM

## OIL ANALYSIS REPORT

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



Area  
**Ascendum Machinery**  
Machine Id  
**VOLVO L180H 14 (S/N 5269)**  
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>ASC0005170</b>	ASC0005391	ASC0000732
Sample Date		Client Info		<b>27 Nov 2023</b>	26 Oct 2023	25 Sep 2023
Machine Age	hrs	Client Info		<b>14071</b>	13517	13007
Oil Age	hrs	Client Info		<b>12610</b>	12566	951
Filter Age	hrs	Client Info		<b>2000</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

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

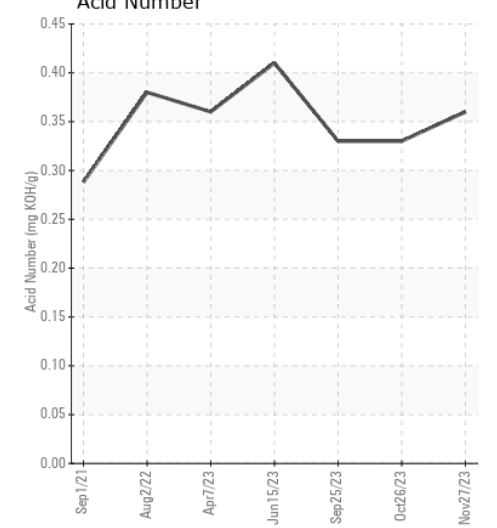
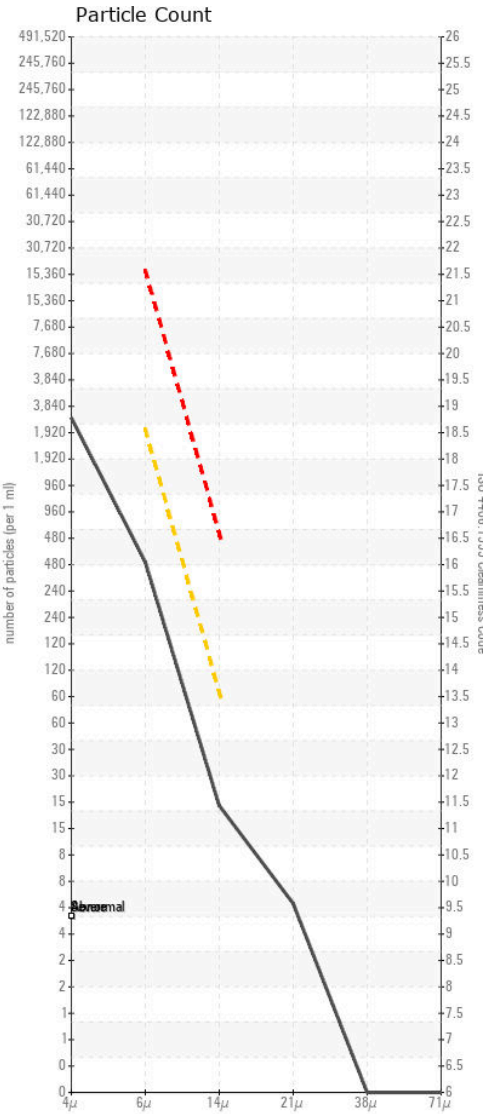
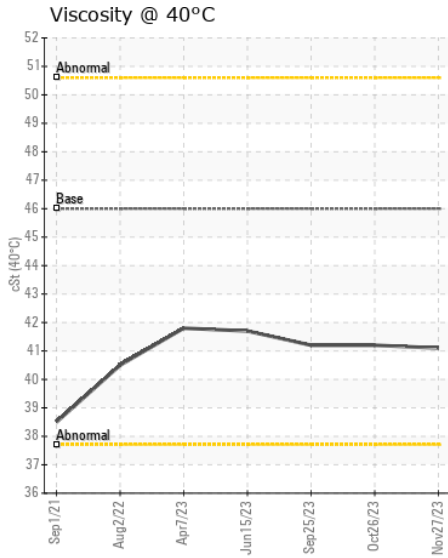
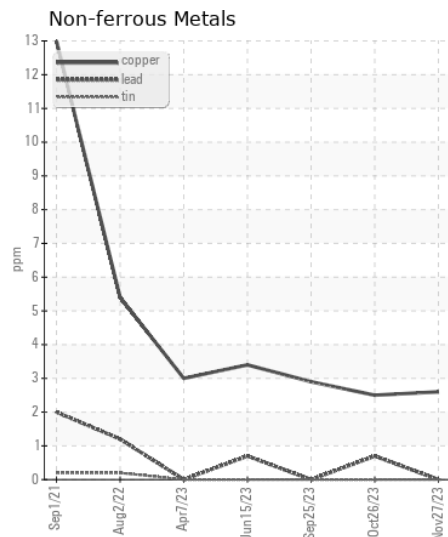
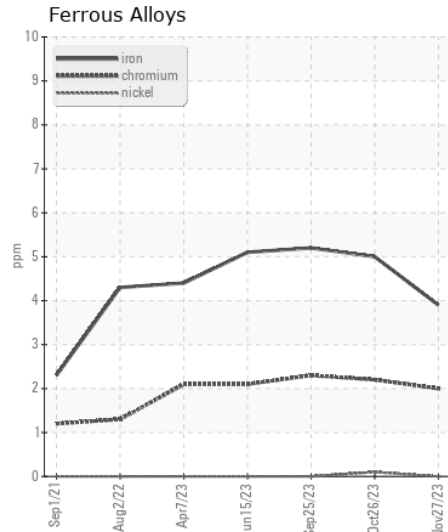
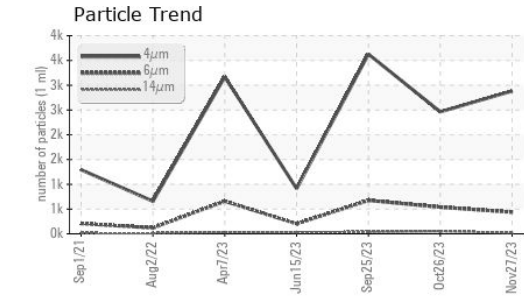
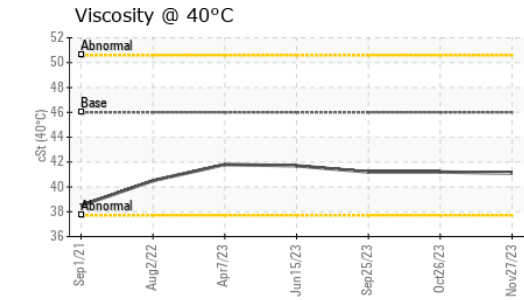
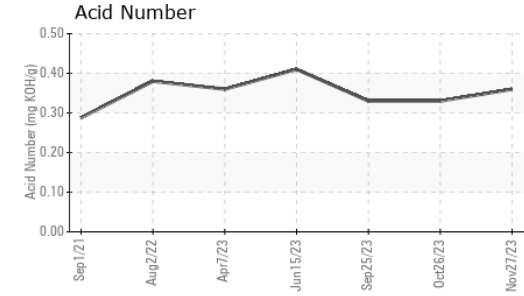
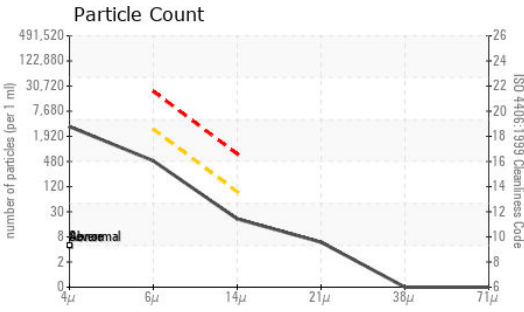
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>1</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>2883</b>	2463	3628
Particles >6µm		ASTM D7647	>2500	<b>437</b>	539	676
Particles >14µm		ASTM D7647	>80	<b>18</b>	53	38
Particles >21µm		ASTM D7647	>20	<b>5</b>	15	10
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	<b>19/16/11</b>	18/16/13	19/17/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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>3</b>	2	4
Boron	ppm	ASTM D5185m	14	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	2.6	<b>15</b>	18	14
Calcium	ppm	ASTM D5185m	49	<b>49</b>	49	49
Phosphorus	ppm	ASTM D5185m	354	<b>279</b>	319	329
Zinc	ppm	ASTM D5185m	419	<b>378</b>	388	393
Sulfur	ppm	ASTM D5185m	3719	<b>1318</b>	1559	1639
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.36</b>	0.33	0.33
Visc @ 40°C	cSt	ASTM D445	46	<b>41.1</b>	41.2	41.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0005170 **Received** : 09 Jan 2024  
**Lab Number** : 06055347 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821296 **Diagnostician** : Wes Davis  
**Test Package** : CONST

**EGGER WOOD PRODUCTS**  
 300 EGGER PARKWAY  
 LINWOOD, NC  
 US 27299  
 Contact: HELMUT THOMAY  
 helmut.thomay@egger.com  
 T:  
 F:

Certificate L2367  
 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)