



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Area  
**Ascendum Machinery**  
Machine Id  
**VOLVO L220H 3075**  
Component  
**Hydraulic System**  
Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0007675</b>	VCP0005380	VCP0003086
Sample Date		Client Info		<b>22 Feb 2024</b>	13 Mar 2023	15 Aug 2022
Machine Age	hrs	Client Info		<b>7496</b>	6005	5009
Oil Age	hrs	Client Info		<b>5189</b>	5194	811
Filter Age	hrs	Client Info		<b>0</b>	0	811
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status				<b>ATTENTION</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>0</b>	2	2
Chromium	ppm	ASTM D5185m	>20	<b>5</b>	3	3
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>1</b>	<1	1
Copper	ppm	ASTM D5185m	>20	<b>6</b>	4	7
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

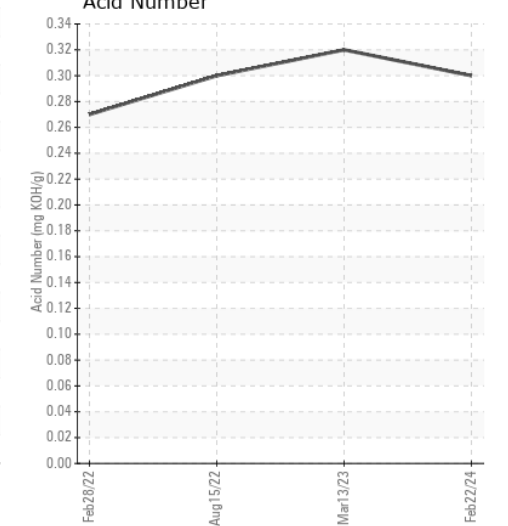
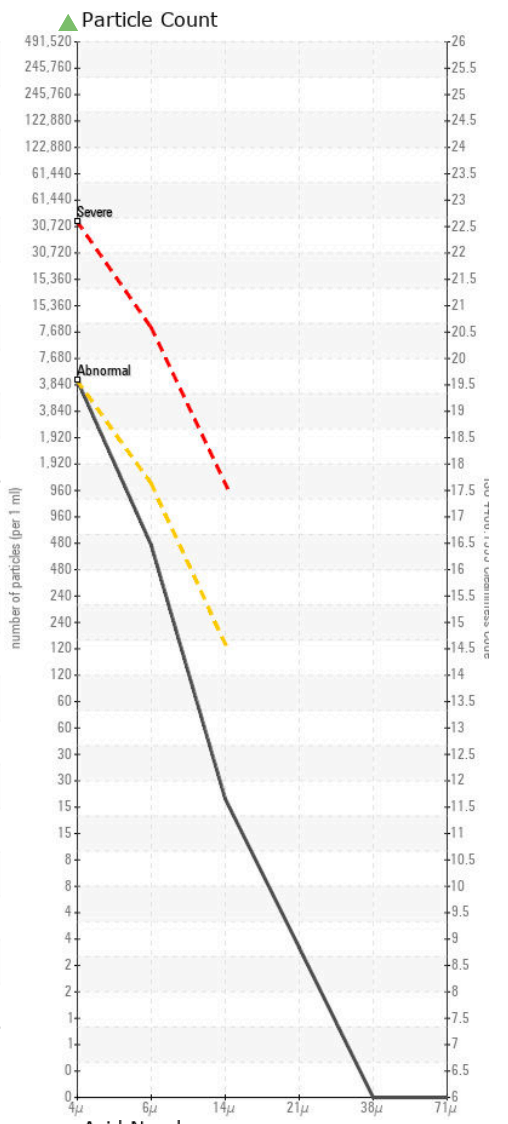
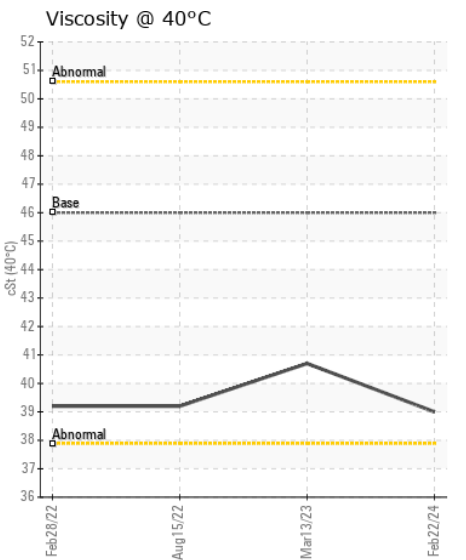
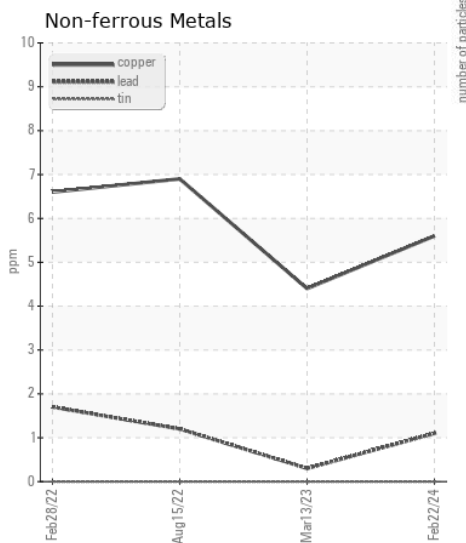
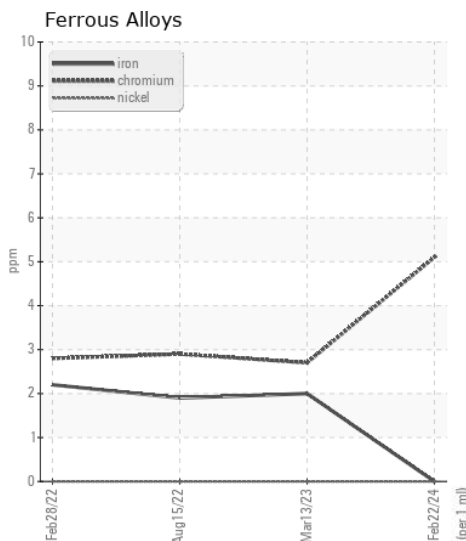
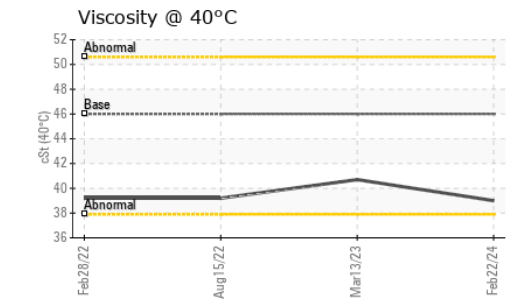
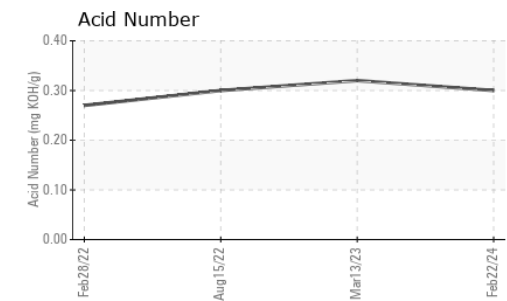
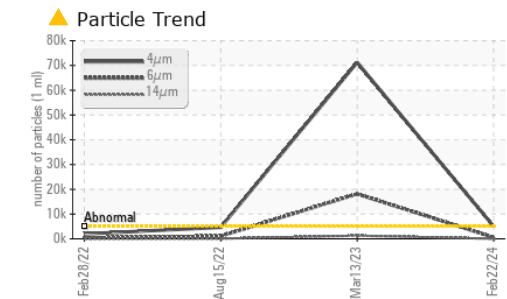
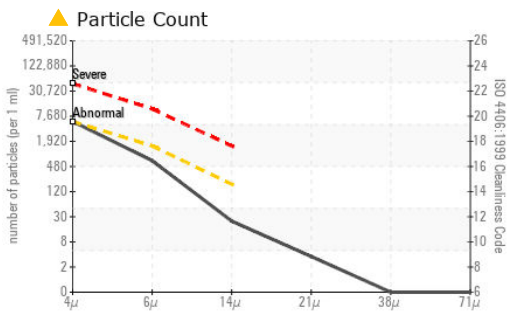
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>5011</b>	71226	4641
Particles >6µm		ASTM D7647	>1300	<b>581</b>	18143	1079
Particles >14µm		ASTM D7647	>160	<b>21</b>	1268	50
Particles >21µm		ASTM D7647	>40	<b>3</b>	311	7
Particles >38µm		ASTM D7647	>10	<b>0</b>	31	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	2	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/16/12</b>	23/21/17	19/17/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	LIGHT	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	>0.2	<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>0</b>	1	0
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>	0	0
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	2.6	<b>1</b>	11	<1
Calcium	ppm	ASTM D5185m	49	<b>42</b>	36	41
Phosphorus	ppm	ASTM D5185m	354	<b>290</b>	263	316
Zinc	ppm	ASTM D5185m	419	<b>398</b>	347	396
Sulfur	ppm	ASTM D5185m	3719	<b>2879</b>	3132	3088
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.30</b>	0.32	0.30
Visc @ 40°C	cSt	ASTM D445	46	<b>39.0</b>	40.7	39.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0007675 **Received** : 27 Feb 2024  
**Lab Number** : 06101543 **Tested** : 28 Feb 2024  
**Unique Number** : 10899773 **Diagnosed** : 28 Feb 2024 - Wes Davis  
**Test Package** : CONST

**GERDAU AMERISTEEL**  
 4221 W BOY SCOUT BLVD #600  
 TAMPA, FL  
 US 33607  
 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)

T:  
F: