



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**VOLVO A45G 353495**  
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		ASC0006311	VCP418456	VCP415646
Sample Date		Client Info		04 Jan 2024	02 Oct 2023	14 Jun 2023
Machine Age	hrs	Client Info		984	984	464
Oil Age	hrs	Client Info		984	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				NORMAL	ATTENTION	ATTENTION

### WEAR

All component wear rates are normal.

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

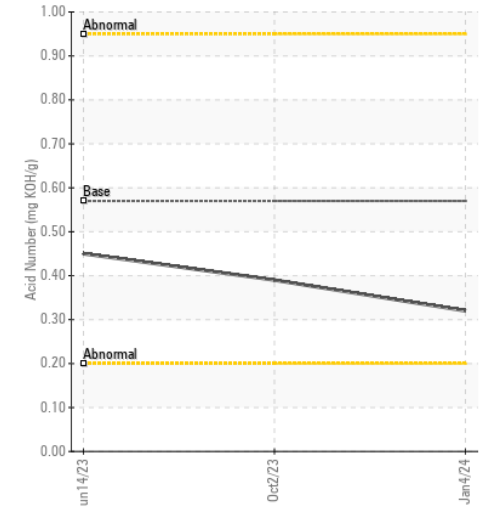
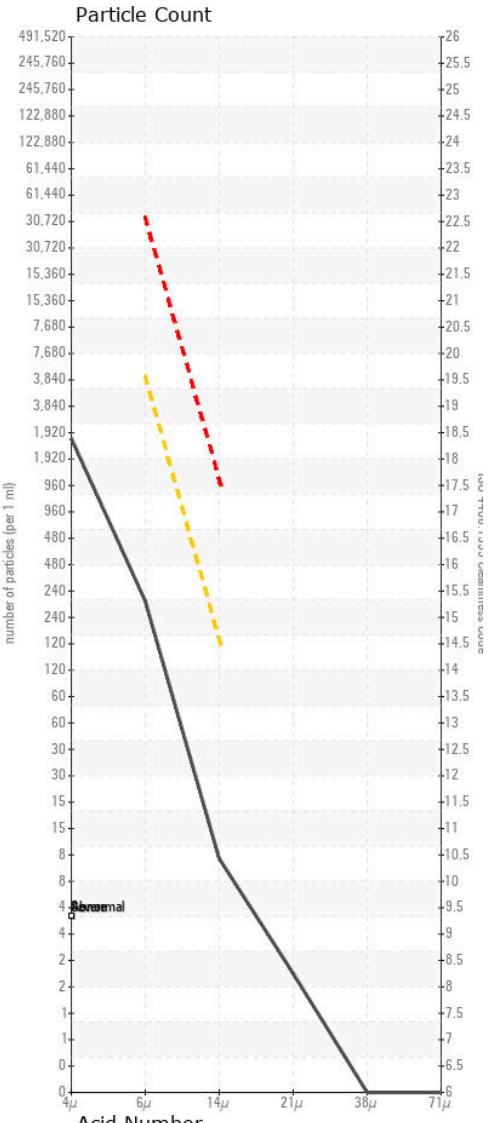
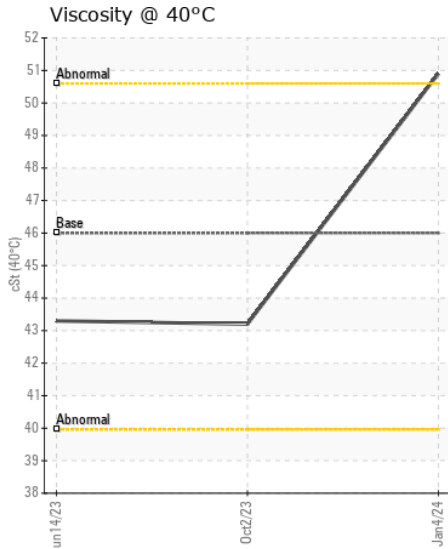
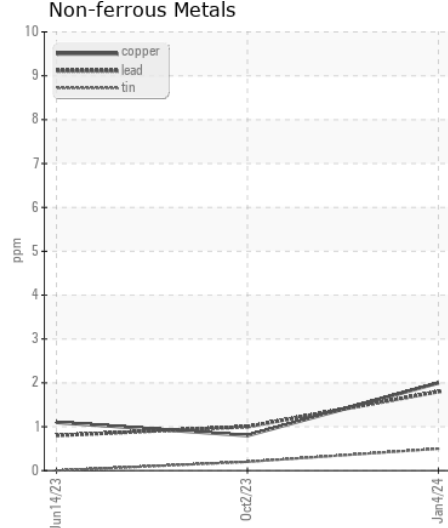
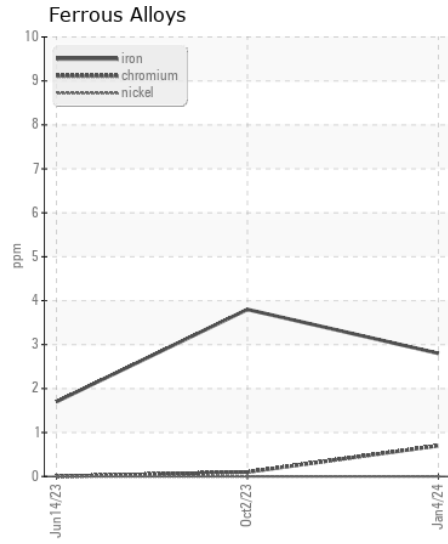
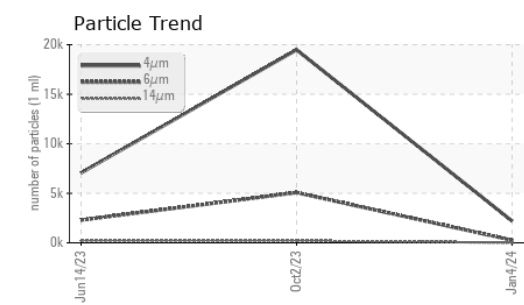
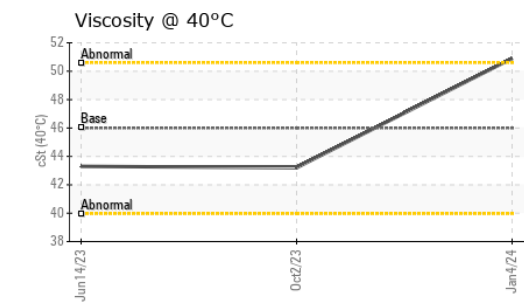
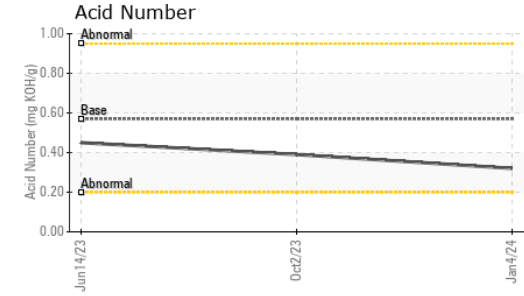
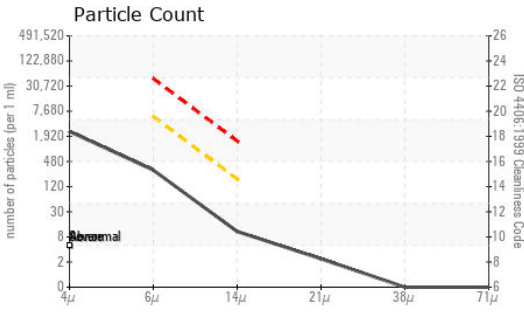
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	3	6	5
Potassium	ppm	ASTM D5185m	>20	2	<1	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		2202	19485	7058
Particles >6µm		ASTM D7647	>5000	262	▲ 5071	2291
Particles >14µm		ASTM D7647	>160	9	▲ 211	▲ 212
Particles >21µm		ASTM D7647	>40	2	50	▲ 57
Particles >38µm		ASTM D7647	>10	0	2	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	18/15/10	▲ 21/20/15	▲ 20/18/15
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		0	<1	0
Boron	ppm	ASTM D5185m	5	2	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	2	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	10	<1	<1
Calcium	ppm	ASTM D5185m	200	85	56	73
Phosphorus	ppm	ASTM D5185m	300	297	298	323
Zinc	ppm	ASTM D5185m	370	314	437	440
Sulfur	ppm	ASTM D5185m	2500	3120	1285	1458
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.32	0.39	0.45
Visc @ 40°C	cSt	ASTM D445	46	50.9	43.2	43.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0006311 **Received** : 11 Jan 2024  
**Lab Number** : 06058012 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829394 **Diagnostician** : Don Baldrige  
**Test Package** : CONST

**117 - ASCENDUM MACHINERY INC - GREENVILLE**  
 2002 N GREENE ST  
 GREENVILLE, NC  
 US 27834  
 Contact: BRANDON JENKINS  
 BRANDON.JENKINS@ASCENDUMMACHINERY.COM  
 T:  
 F: (704)494-8197

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)