



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area  
**[MMA FUQUAY]**  
 Machine Id  
**VOLVO A40G 340791**  
 Component  
**Hydraulic System**  
 Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

### RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011229	ASC0010418	VCP377406
Sample Date		Client Info		07 Jun 2024	19 Mar 2024	03 Jun 2022
Machine Age	hrs	Client Info		11271	10956	10416
Oil Age	hrs	Client Info		3271	8376	0
Filter Age	hrs	Client Info		1271	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				ABNORMAL	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	2	4	2
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	3	2
Lead	ppm	ASTM D5185m	>20	1	2	<1
Copper	ppm	ASTM D5185m	>150	2	3	2
Tin	ppm	ASTM D5185m	>20	0	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

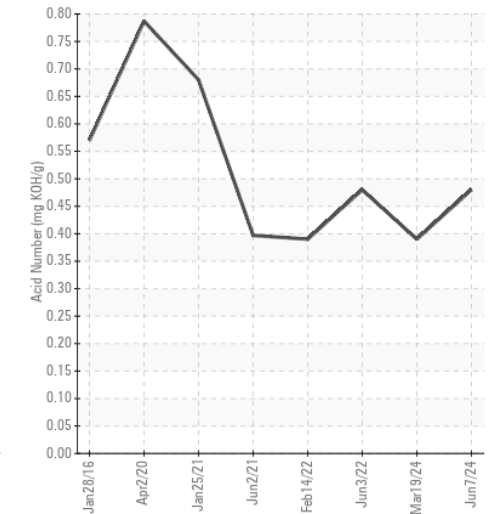
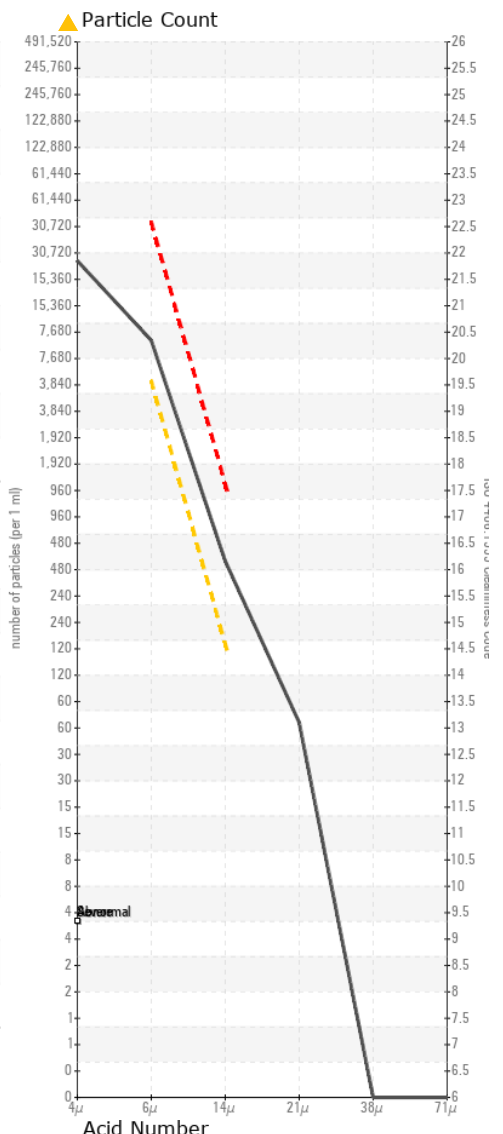
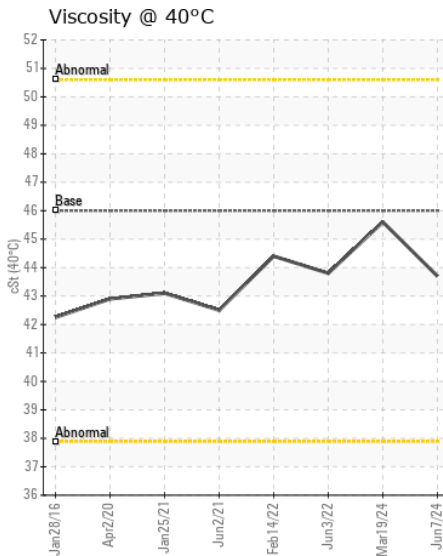
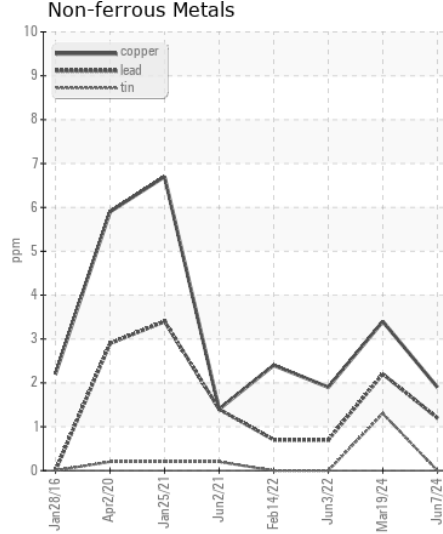
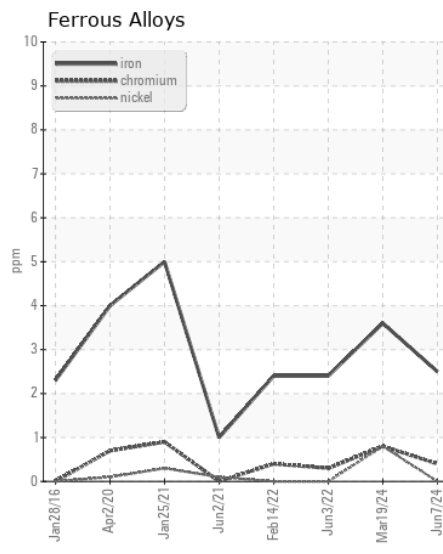
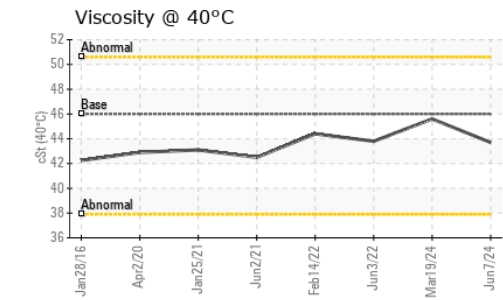
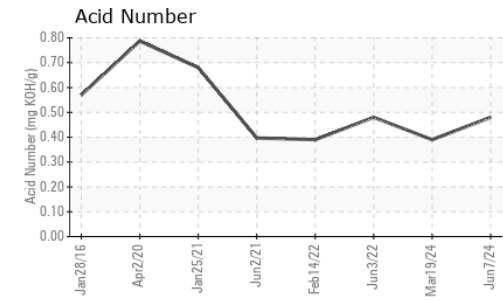
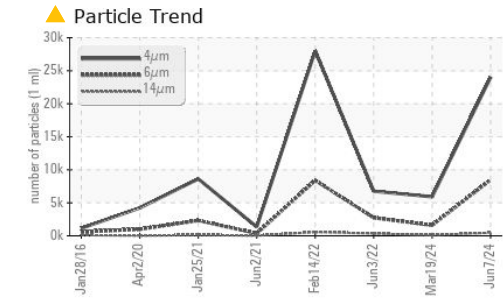
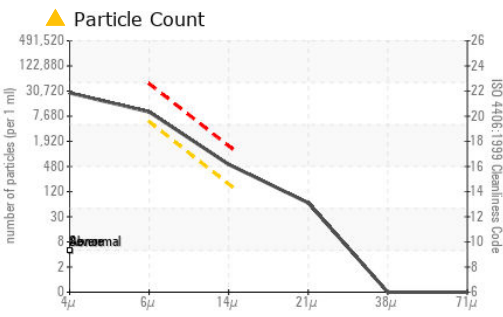
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	7	7	6
Potassium	ppm	ASTM D5185m	>20	1	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		24025	5913	6759
Particles >6µm		ASTM D7647	>5000	8473	1606	2742
Particles >14µm		ASTM D7647	>160	472	94	341
Particles >21µm		ASTM D7647	>40	57	19	69
Particles >38µm		ASTM D7647	>10	0	1	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	22/20/16	20/18/14	20/19/16
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 oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		2	1	2
Boron	ppm	ASTM D5185m	14	0	0	2
Barium	ppm	ASTM D5185m	0.0	0	0	<1
Molybdenum	ppm	ASTM D5185m	0.0	0	1	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	0
Magnesium	ppm	ASTM D5185m	2.6	1	3	3
Calcium	ppm	ASTM D5185m	49	371	359	358
Phosphorus	ppm	ASTM D5185m	354	420	420	399
Zinc	ppm	ASTM D5185m	419	559	502	514
Sulfur	ppm	ASTM D5185m	3719	3434	2973	2849
Acid Number (AN)	mg KOH/g	ASTM D8045		0.48	0.39	0.48
Visc @ 40°C	cSt	ASTM D445	46	43.7	45.6	43.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0011229  
**Lab Number** : 06210010  
**Unique Number** : 11082874  
**Test Package** : CONST

**113 - ASCENDUM MACHINERY INC - GARNER**  
 3561 JONES SAUSAGE ROAD  
 GARNER, NC  
 US 27529  
 Contact: TRENT BROADWELL  
 trent.broadwell@ascendummachinery.com  
 T: (919)661-8817  
 F: (919)661-9038

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)