



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**VOLVO A45GFS 352230**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006068	VCP441547	VCP418598
Sample Date		Client Info		04 Jun 2024	18 Oct 2023	07 Jun 2023
Machine Age	hrs	Client Info		4721	4097	3621
Oil Age	hrs	Client Info		4097	0	0
Filter Age	hrs	Client Info		4097	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	13	6	8
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	2	1
Lead	ppm	ASTM D5185m	>40	<1	<1	1
Copper	ppm	ASTM D5185m	>330	2	2	3
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

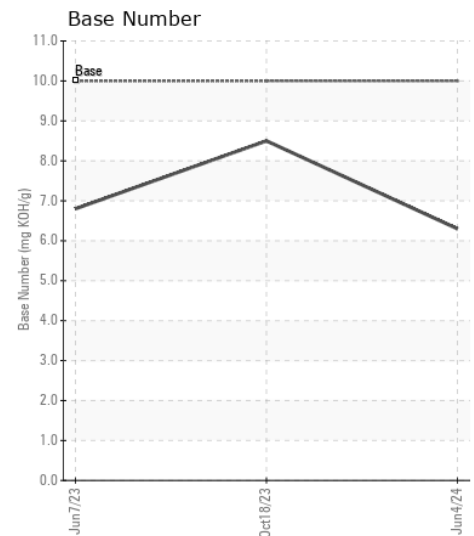
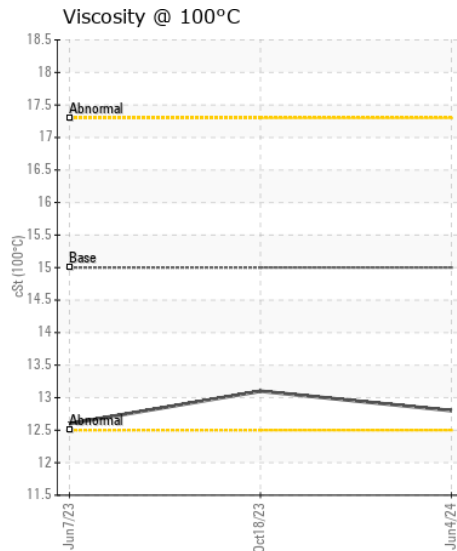
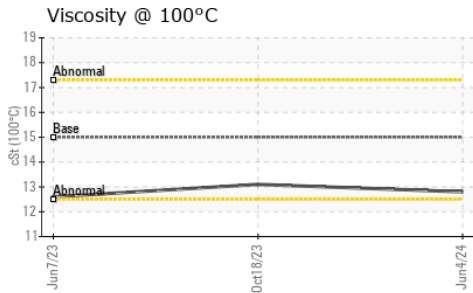
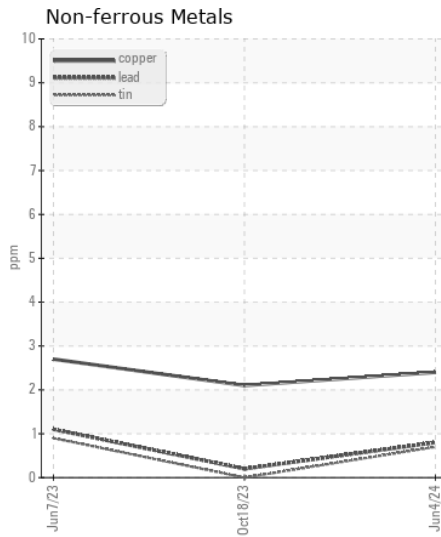
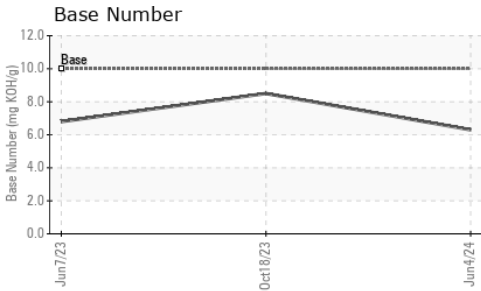
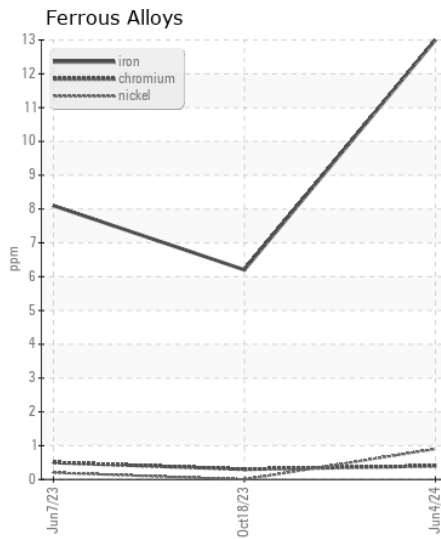
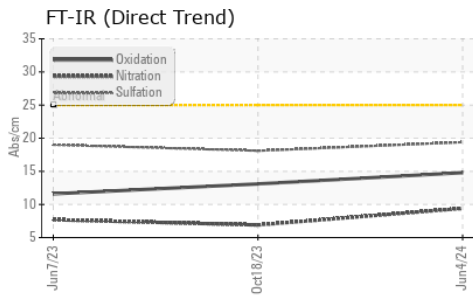
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	3	4
Potassium	ppm	ASTM D5185m	>20	2	0	0
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.4	6.9	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	18.1	19.0
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	>0.2	NEG	NEG	NEG

### FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	1	3
Boron	ppm	ASTM D5185m	2.5	4	2	5
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	59	54	25
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	901	881	333
Calcium	ppm	ASTM D5185m	2057	1154	1201	2026
Phosphorus	ppm	ASTM D5185m	935	999	974	938
Zinc	ppm	ASTM D5185m	1223	1240	1284	1122
Sulfur	ppm	ASTM D5185m	4079	3528	3260	4054
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	13.1	11.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.3	8.5	6.8
Visc @ 100°C	cSt	ASTM D445	15.0	12.8	13.1	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : ASC0006068

**Lab Number** : 06212740

**Unique Number** : 11085604

**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 17 Jun 2024

**Tested** : 19 Jun 2024

**Diagnosed** : 19 Jun 2024 - Angela Borella

**117 - ASCENDUM MACHINERY INC - GREENVILLE**

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GREENVILLE, NC

US 27834

Contact: ALLEN WILLIAMS

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T:

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)

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