



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**VOLVO A45G 13382 (S/N 353445)**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 30 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0008592	VCP412120	VCP412169
Sample Date		Client Info		23 Feb 2024	10 Jan 2024	21 Nov 2023
Machine Age	hrs	Client Info		3287	2733	2378
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	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	14	8	16
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	6	5	6
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	2	<1
Lead	ppm	ASTM D5185m	>40	<1	0	1
Copper	ppm	ASTM D5185m	>330	7	21	21
Tin	ppm	ASTM D5185m	>15	1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

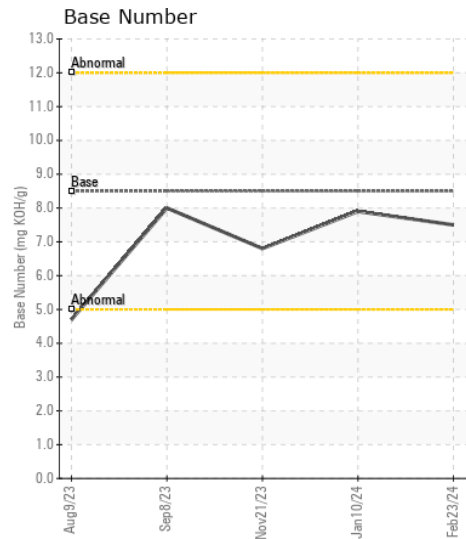
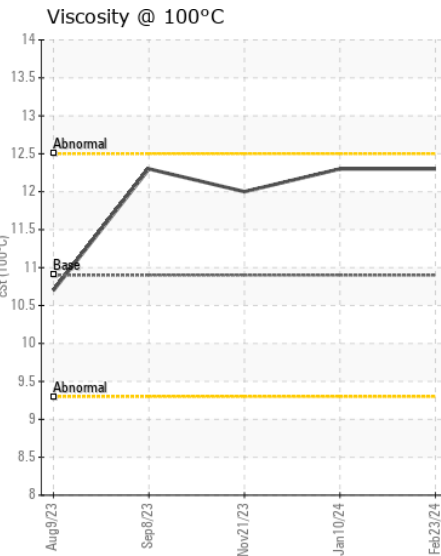
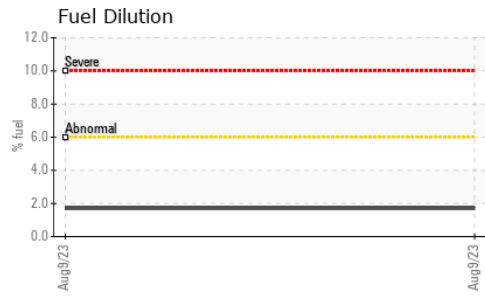
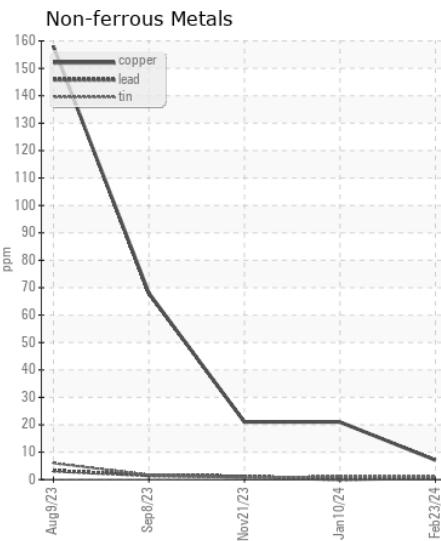
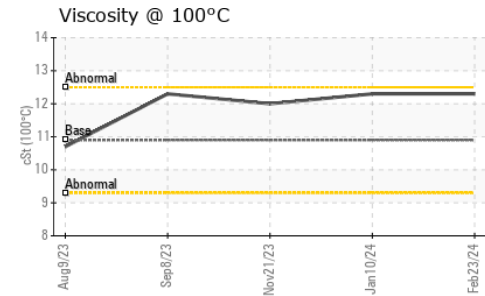
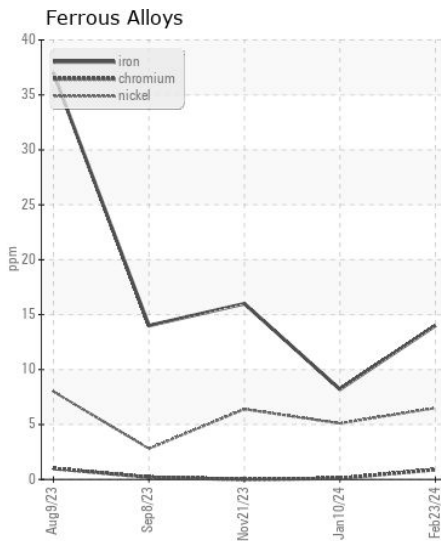
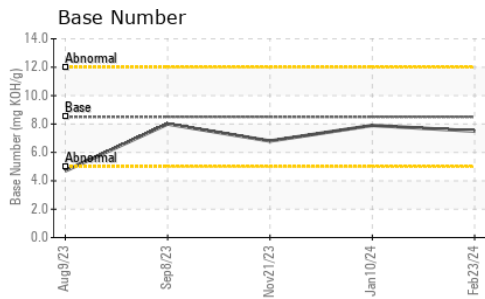
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	3	4
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Fuel	%	ASTM D3524	>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	0.4	0.7
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.0	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	18.0	19.2
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>75	1	<1	1
Boron	ppm	ASTM D5185m	250	2	5	9
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	64	57	58
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	450	978	825	870
Calcium	ppm	ASTM D5185m	3000	1124	975	1062
Phosphorus	ppm	ASTM D5185m	1150	1059	919	869
Zinc	ppm	ASTM D5185m	1350	1232	1112	1152
Sulfur	ppm	ASTM D5185m	4250	3269	2724	2625
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	13.0	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.5	7.9	6.8
Visc @ 100°C	cSt	ASTM D445	10.9	12.3	12.3	12.0



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0008592 **Received** : 18 Mar 2024  
**Lab Number** : 06121399 **Tested** : 19 Mar 2024  
**Unique Number** : 10930232 **Diagnosed** : 20 Mar 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, TBN )

**117 - ASCENDUM MACHINERY INC - GREENVILLE**  
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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) F: (704)494-8197