



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**VOLVO A30D 14058**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0004495</b>	VCP188457	---
Sample Date		Client Info		<b>03 Jul 2024</b>	05 Jun 2017	---
Machine Age	hrs	Client Info		<b>10297</b>	7563	---
Oil Age	hrs	Client Info		<b>2734</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>31</b>	6	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>6</b>	2	---
Lead	ppm	ASTM D5185m	>20	<b>2</b>	0	---
Copper	ppm	ASTM D5185m	>15	<b>3</b>	<1	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

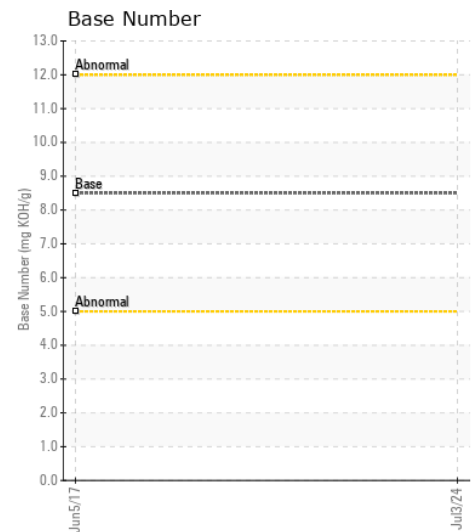
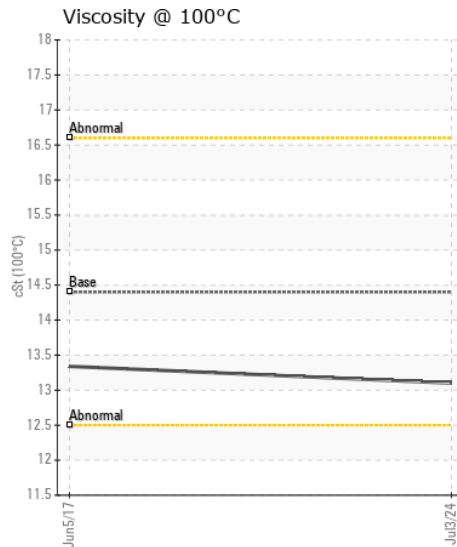
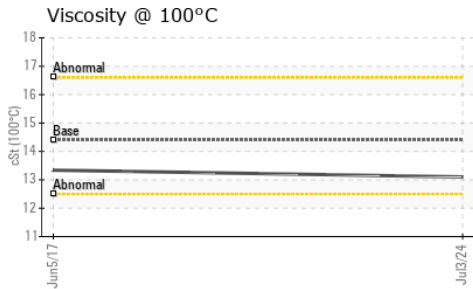
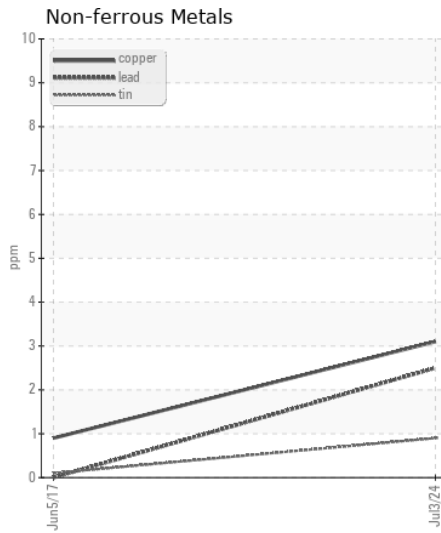
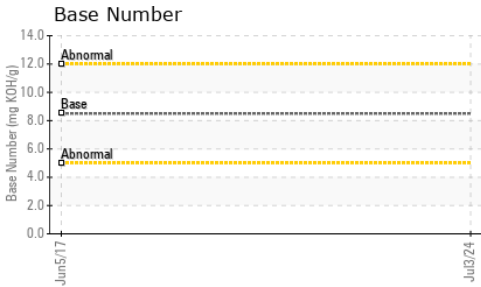
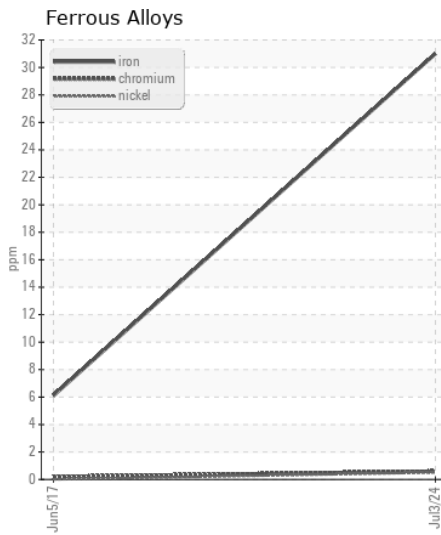
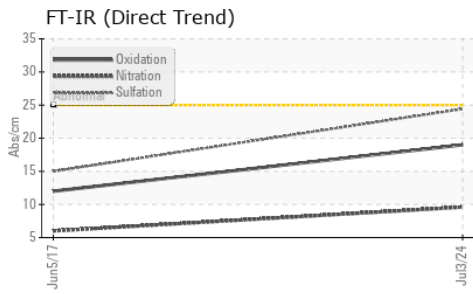
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>15</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	0	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>1.7</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.6</b>	6.	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.4</b>	15.	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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	>158	<b>2</b>	5	---
Boron	ppm	ASTM D5185m	250	<b>35</b>	62	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	100	<b>39</b>	50	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m	450	<b>560</b>	599	---
Calcium	ppm	ASTM D5185m	3000	<b>1488</b>	1204	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1081</b>	849	---
Zinc	ppm	ASTM D5185m	1350	<b>1137</b>	984	---
Sulfur	ppm	ASTM D5185m	4250	<b>3593</b>	2955	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.0</b>	12.	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.5</b>	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.1</b>	13.34	---



Certificate L2367

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

**Sample No.** : ASC0004495

**Lab Number** : 06229971

**Unique Number** : 11113464

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

**Received** : 08 Jul 2024

**Tested** : 09 Jul 2024

**Diagnosed** : 09 Jul 2024 - Don Baldrige

**520 - ASCENDUM MACHINERY INC - KNOXVILLE**

5730 RUTLEDGE PIKE

KNOXVILLE, TN

US 37924

Contact: BRANDON GRANT

brandon.grant@ascendummachinery.com

T: (865)525-1845

F: (865)525-0251

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)