



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**VOLVO L70 15983**

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		ASC0003383	VCP286418	---
Sample Date		Client Info		06 Feb 2024	18 Sep 2020	---
Machine Age	hrs	Client Info		5596	4832	---
Oil Age	hrs	Client Info		4832	0	---
Filter Age	hrs	Client Info		4832	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	14	12	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	2	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>30	2	0	---
Lead	ppm	ASTM D5185m	>40	14	8	---
Copper	ppm	ASTM D5185m	>20	4	2	---
Tin	ppm	ASTM D5185m	>20	2	1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

### CONTAMINATION

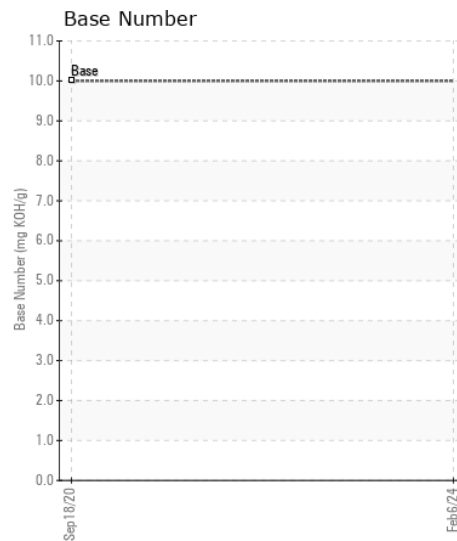
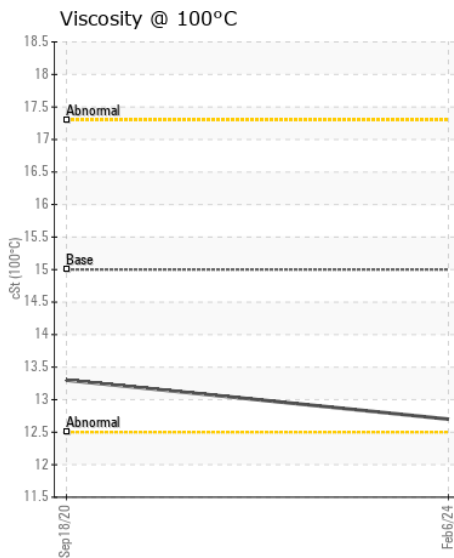
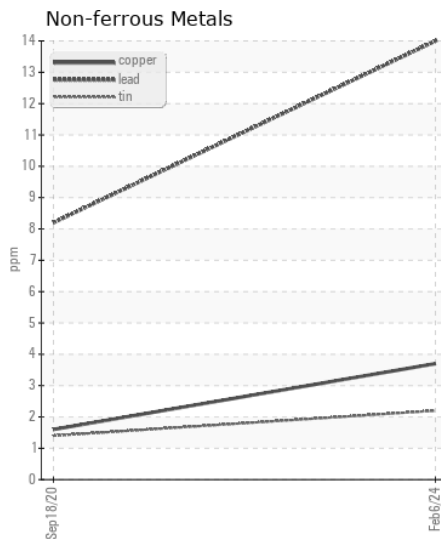
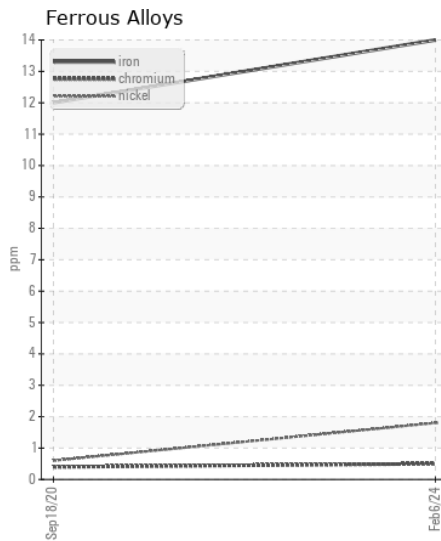
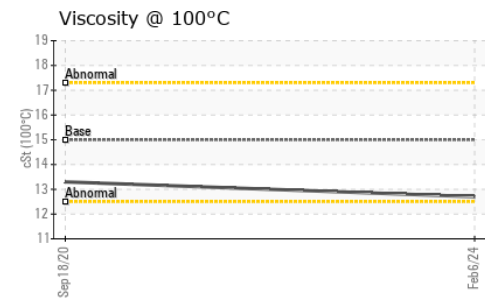
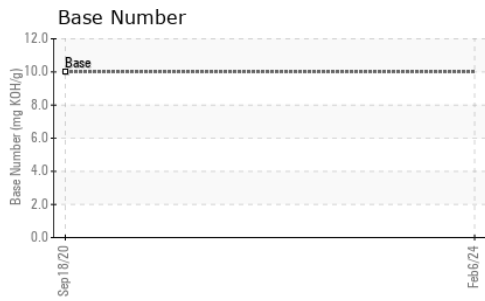
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	6	---
Potassium	ppm	ASTM D5185m	>20	1	<1	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	8.8	7.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	22.3	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	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		0	3	---
Boron	ppm	ASTM D5185m	2.5	53	61	---
Barium	ppm	ASTM D5185m	0.0	13	0	---
Molybdenum	ppm	ASTM D5185m	0.7	45	42	---
Manganese	ppm	ASTM D5185m	0.0	<1	<1	---
Magnesium	ppm	ASTM D5185m	256	471	496	---
Calcium	ppm	ASTM D5185m	2057	1593	1581	---
Phosphorus	ppm	ASTM D5185m	935	950	737	---
Zinc	ppm	ASTM D5185m	1223	1022	858	---
Sulfur	ppm	ASTM D5185m	4079	3117	2229	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.8	20.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.1	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	12.7	13.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0003383 **Received** : 12 Feb 2024  
**Lab Number** : 06085699 **Tested** : 12 Feb 2024  
**Unique Number** : 10873144 **Diagnosed** : 12 Feb 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**WHITMIRE GRADING**  
 130 BULLDOZER LANE  
 BREVARD, NC  
 US 28712

Contact: DENNY WHITMIRE  
 denny@whitmiregrading.com

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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