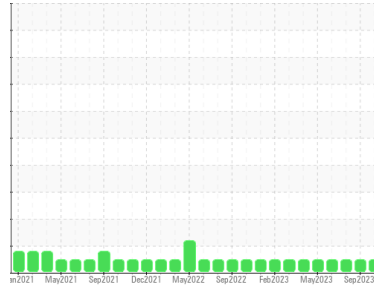




Area  
**Ascendum Machinery**  
 Machine Id  
**VOLVO L180H 14 (S/N 5269)**  
 Component  
**Diesel Engine**  
 Fluid  
**VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



**DIAGNOSIS**

**Recommendation**  
 Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is no indication of any contamination in the oil.

**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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>ASC0005427</b>	ASC0000726	ASC0000333
Sample Date	Client Info			<b>26 Oct 2023</b>	25 Sep 2023	31 Jul 2023
Machine Age	hrs Client Info			<b>13517</b>	13007	12512
Oil Age	hrs Client Info			<b>510</b>	495	456
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m		>100	<b>&lt;1</b>	2	2
Chromium	ppm ASTM D5185m		>10	<b>0</b>	0	0
Nickel	ppm ASTM D5185m		>10	<b>0</b>	0	0
Titanium	ppm ASTM D5185m			<b>0</b>	0	0
Silver	ppm ASTM D5185m		>2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m		>10	<b>&lt;1</b>	<1	<1
Lead	ppm ASTM D5185m		>20	<b>0</b>	<1	<1
Copper	ppm ASTM D5185m		>15	<b>0</b>	<1	<1
Tin	ppm ASTM D5185m		>10	<b>&lt;1</b>	0	0
Vanadium	ppm ASTM D5185m			<b>0</b>	0	<1
Cadmium	ppm ASTM D5185m			<b>0</b>	0	0

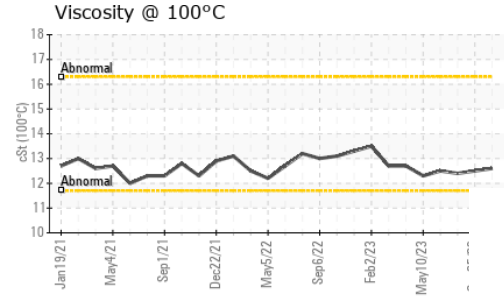
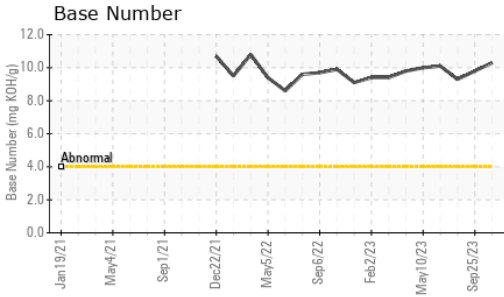
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m			<b>37</b>	40	40
Barium	ppm ASTM D5185m			<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m			<b>37</b>	42	38
Manganese	ppm ASTM D5185m			<b>0</b>	0	<1
Magnesium	ppm ASTM D5185m			<b>502</b>	501	481
Calcium	ppm ASTM D5185m			<b>1627</b>	1757	1627
Phosphorus	ppm ASTM D5185m			<b>927</b>	940	874
Zinc	ppm ASTM D5185m			<b>1137</b>	1171	1067
Sulfur	ppm ASTM D5185m			<b>2890</b>	3141	3171

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m		>20	<b>4</b>	3	3
Sodium	ppm ASTM D5185m			<b>&lt;1</b>	2	2
Potassium	ppm ASTM D5185m		>20	<b>0</b>	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	% *ASTM D7844		>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm *ASTM D7624		>20	<b>6.9</b>	6.9	6.6
Sulfation	Abs/.1mm *ASTM D7415		>30	<b>21.8</b>	21.5	21.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414		>25	<b>20.5</b>	20.1	19.4
Base Number (BN)	mg KOH/g ASTM D2896			<b>10.3</b>	9.8	9.3

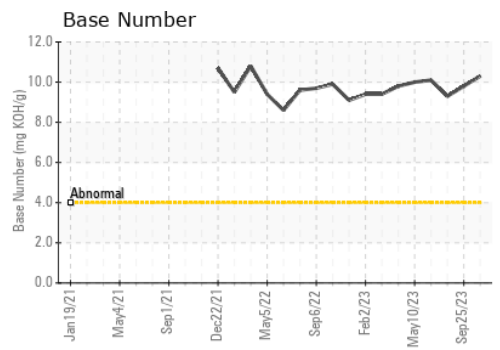
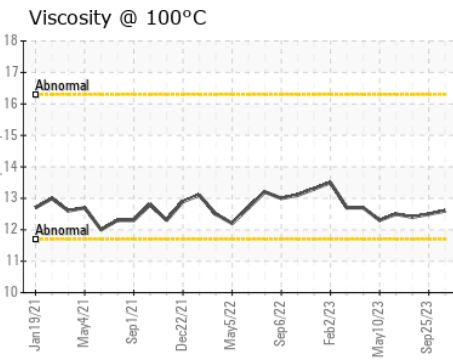
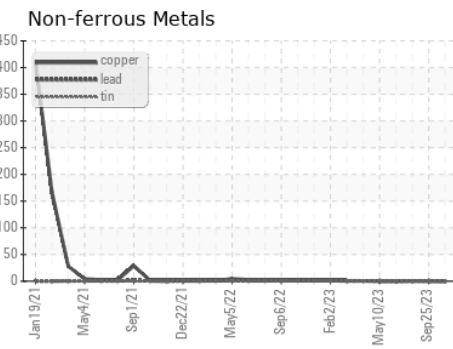
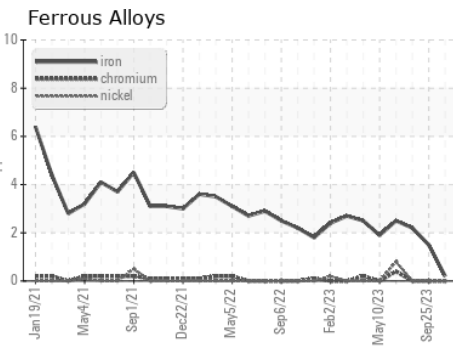
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.6	12.5	12.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0005427 **Received** : 14 Nov 2023  
**Lab Number** : 06006893 **Diagnosed** : 15 Nov 2023  
**Unique Number** : 10740655 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**EGGER WOOD PRODUCTS**  
 300 EGGER PARKWAY  
 LINWOOD, NC  
 US 27299  
 Contact: HELMUT THOMAY  
 helmut.thomay@egger.com  
 T:  
 F:

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)