



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



Area  
**[W07014183-1]**  
Machine Id  
**VOLVO ECR145E 316277**  
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>ML0000565</b>	---	---
Sample Date		Client Info		<b>26 Jan 2024</b>	---	---
Machine Age	hrs	Client Info		<b>560</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>35</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>9</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>12</b>	---	---
Lead	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>15	<b>10</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>3</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

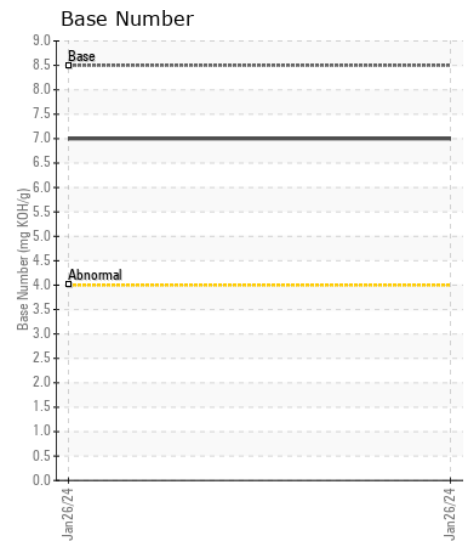
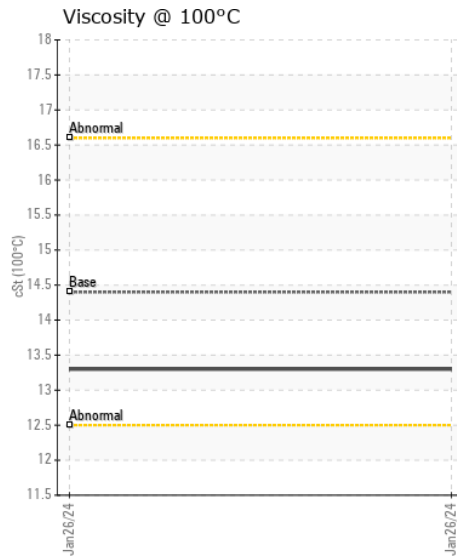
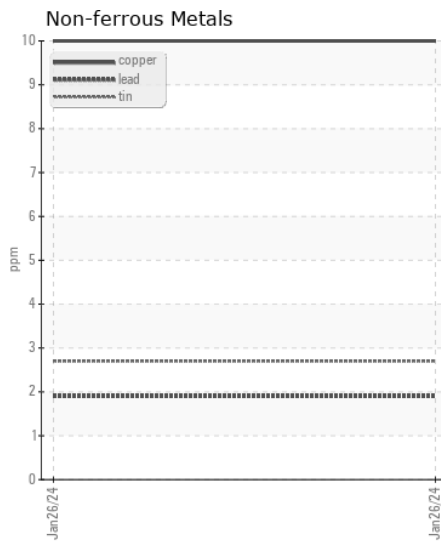
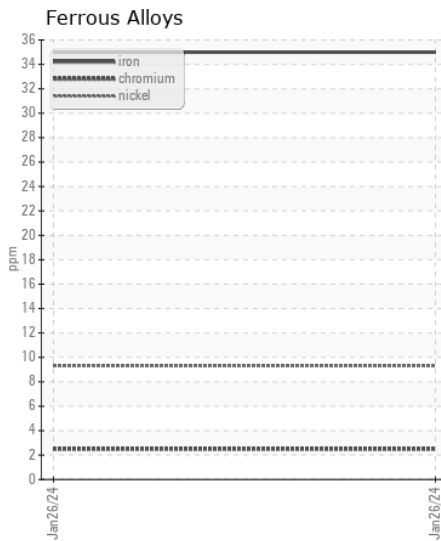
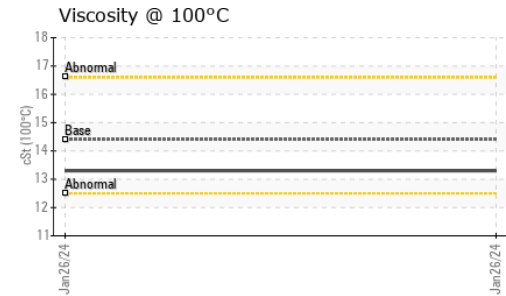
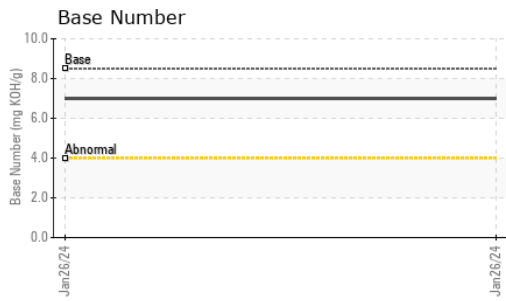
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>17</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.1	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.1</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.2</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---

**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	>158	<b>2</b>	---	---
Boron	ppm	ASTM D5185m	250	<b>16</b>	---	---
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m	100	<b>10</b>	---	---
Manganese	ppm	ASTM D5185m		<b>3</b>	---	---
Magnesium	ppm	ASTM D5185m	450	<b>129</b>	---	---
Calcium	ppm	ASTM D5185m	3000	<b>1988</b>	---	---
Phosphorus	ppm	ASTM D5185m	1150	<b>884</b>	---	---
Zinc	ppm	ASTM D5185m	1350	<b>985</b>	---	---
Sulfur	ppm	ASTM D5185m	4250	<b>3333</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.1</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.0</b>	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.3</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0000565 **Received** : 01 Feb 2024  
**Lab Number** : 06077461 **Diagnosed** : 04 Feb 2024  
**Unique Number** : 10859552 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**MCCLUNG-LOGAN EQUIPMENT CO - RICHMOND**  
 1345 MOUNTAIN ROAD  
 GLEN ALLEN, VA  
 US 23060  
 Contact: KYLE RATLIFFE  
 KRATLIFFE@MCCLUNG-LOGAN.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)

T: (804)266-1611