



# OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**ABNORMAL**  
**NORMAL**



Area

**AMR-Cheyenne**

Machine Id

**17529 VOLVO EC460CL 110459**

Component

**Rear Right Final Drive**

Fluid

**VOLVO PREMIUM GEAR OIL 80W-90 GL-5 (--- GAL)**

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ026995</b>	DJJ010208	VC448607
Sample Date		Client Info		<b>14 Mar 2024</b>	09 Apr 2014	06 Feb 2013
Machine Age	hrs	Client Info		<b>8269</b>	4088	2354
Oil Age	hrs	Client Info		<b>0</b>	2176	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>427</b>	211	375
Chromium	ppm	ASTM D5185m	>10	<b>3</b>	3	5
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>1</b>	<1	1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>14</b>	8	18
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	3
Copper	ppm	ASTM D5185m	>50	<b>41</b>	20	48
Tin	ppm	ASTM D5185m	>10	<b>2</b>	0	3
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

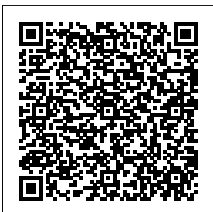
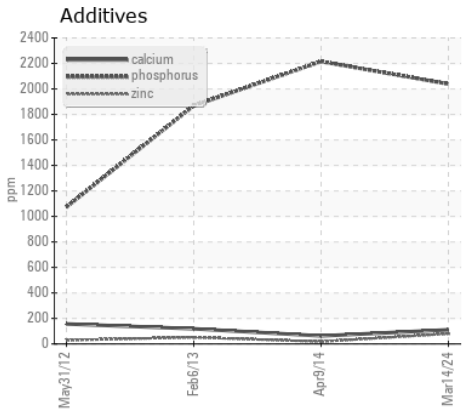
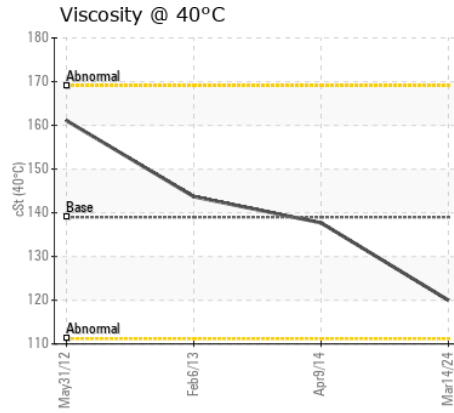
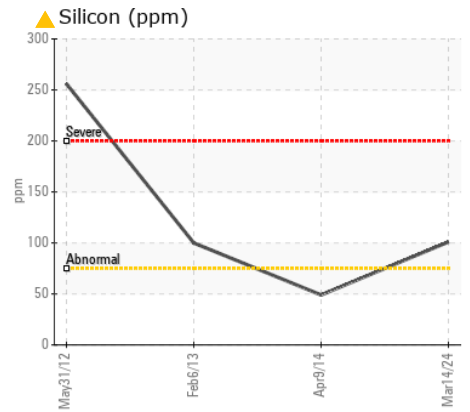
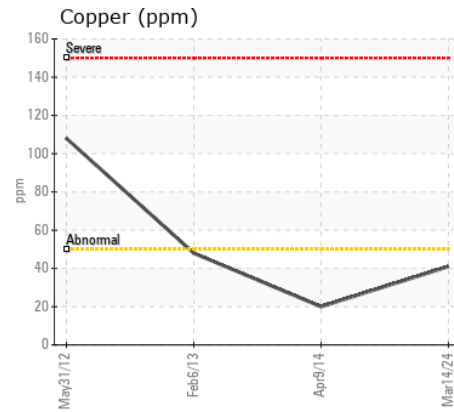
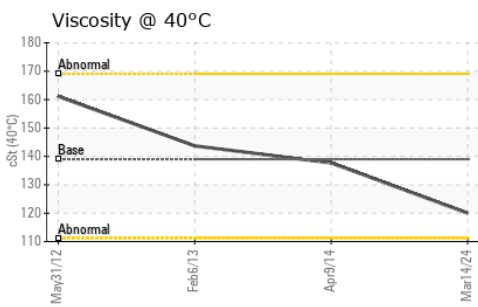
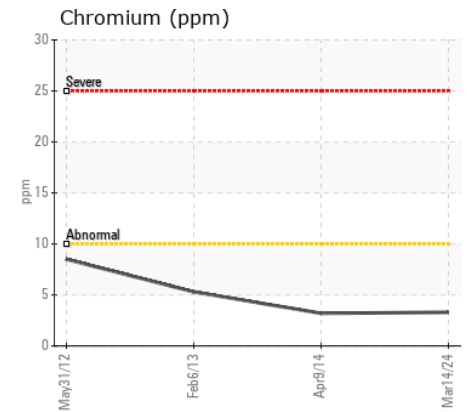
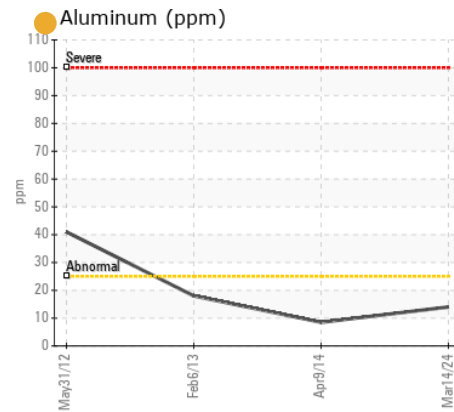
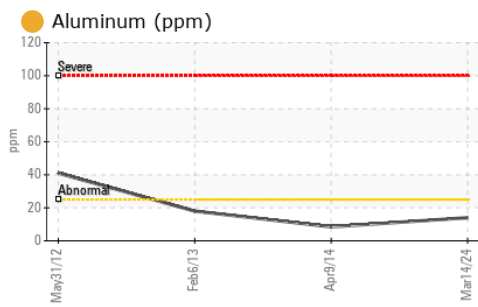
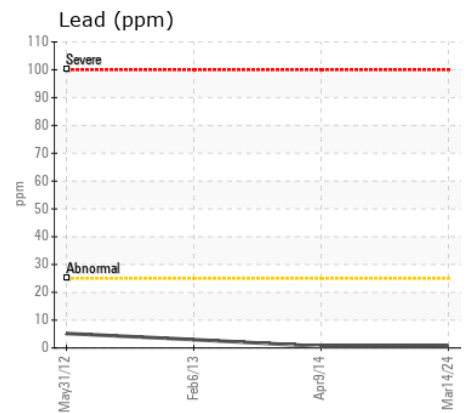
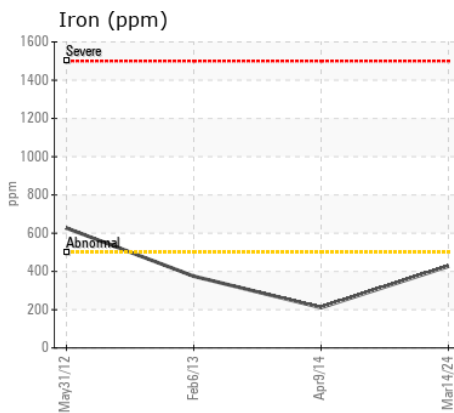
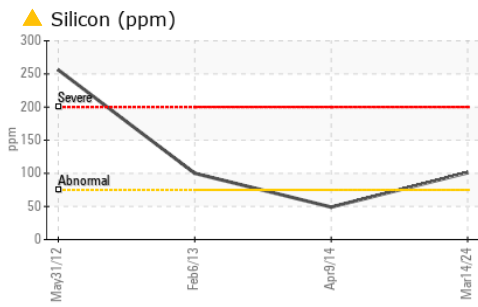
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	<b>▲ 101</b>	49	▲ 100
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	5	10
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>MODER</b>	LIGHT	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>3</b>	5	14
Boron	ppm	ASTM D5185m	379	<b>116</b>	110	63
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	4
Molybdenum	ppm	ASTM D5185m	0.8	<b>2</b>	0	0
Manganese	ppm	ASTM D5185m	0.0	<b>3</b>	3	6
Magnesium	ppm	ASTM D5185m	31	<b>13</b>	<1	8
Calcium	ppm	ASTM D5185m	38	<b>111</b>	63	119
Phosphorus	ppm	ASTM D5185m	1077	<b>2039</b>	2215	1869
Zinc	ppm	ASTM D5185m	46	<b>80</b>	18	52
Sulfur	ppm	ASTM D5185m	23526	<b>21801</b>	7496	17948
Visc @ 40°C	cSt	ASTM D445	139	<b>120</b>	137.7	143.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ026995 **Received** : 10 Apr 2024  
**Lab Number** : 06145452 **Tested** : 11 Apr 2024  
**Unique Number** : 10970260 **Diagnosed** : 14 Apr 2024 - Don Baldrige  
**Test Package** : MOB 1

**ADVANTAGE METALS RECYCLING - CHEYENNE**  
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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)