



# VOLVO

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO EC480E 314146**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 30 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP432204</b>	VCP419108	VCP424699
Sample Date		Client Info		<b>31 Jan 2024</b>	28 Aug 2023	03 May 2023
Machine Age	hrs	Client Info		<b>6892</b>	6421	5940
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>11</b>	6	7
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>3</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>4</b>	2	1
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>15	<b>4</b>	<1	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

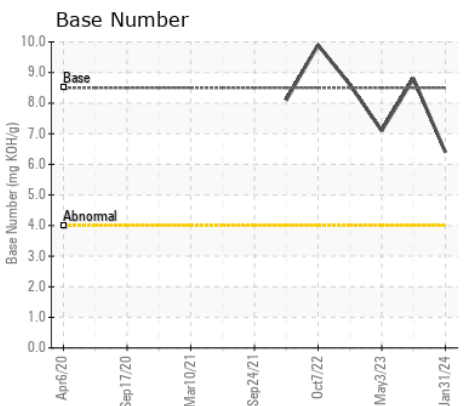
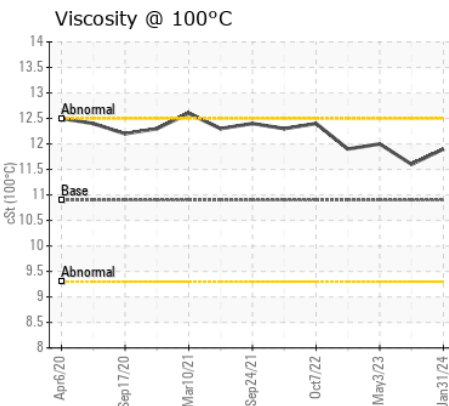
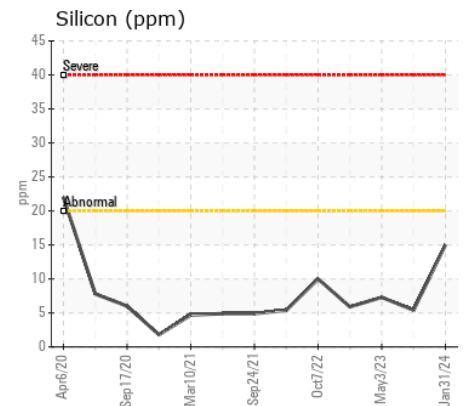
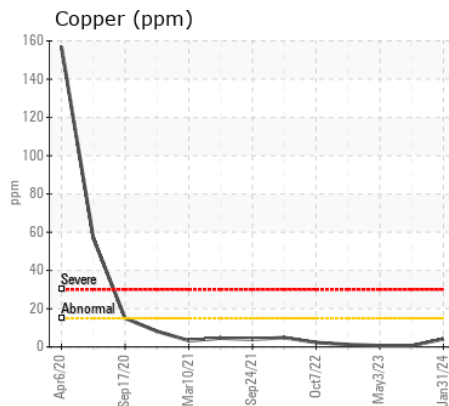
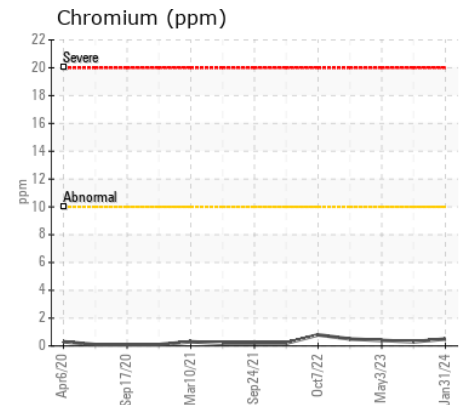
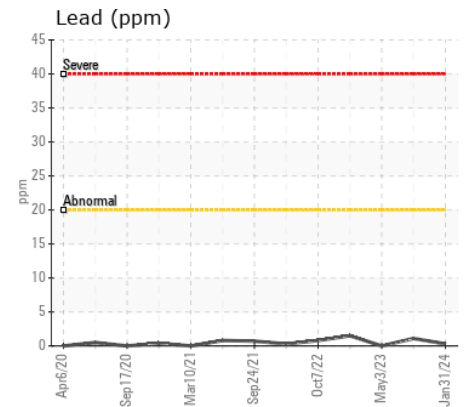
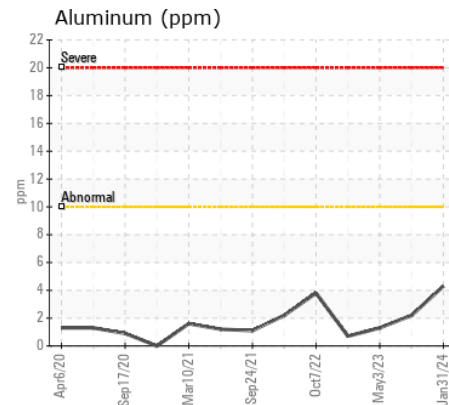
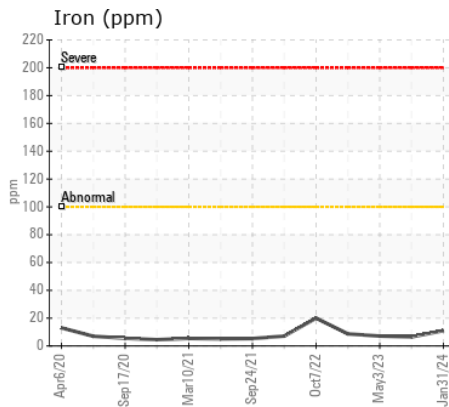
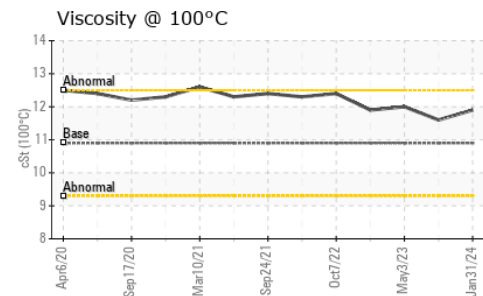
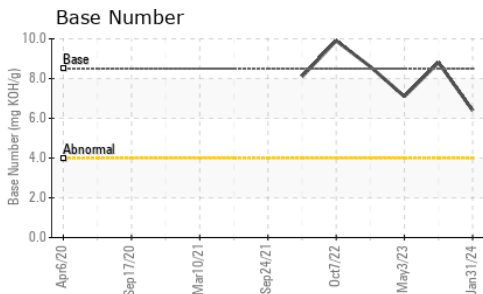
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>15</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	0
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.3</b>	8.3	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	19.7	18.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	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	>0.1	<b>NEG</b>	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	>75	<b>0</b>	3	2
Boron	ppm	ASTM D5185m	250	<b>68</b>	35	12
Barium	ppm	ASTM D5185m	10	<b>26</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>148</b>	43	54
Manganese	ppm	ASTM D5185m		<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m	450	<b>884</b>	514	769
Calcium	ppm	ASTM D5185m	3000	<b>2141</b>	1730	1507
Phosphorus	ppm	ASTM D5185m	1150	<b>1136</b>	788	917
Zinc	ppm	ASTM D5185m	1350	<b>1382</b>	990	1062
Sulfur	ppm	ASTM D5185m	4250	<b>4792</b>	3432	3241
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.1</b>	17.5	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.4</b>	8.8	7.1
Visc @ 100°C	cSt	ASTM D445	10.9	<b>11.9</b>	11.6	12.0



Certificate L2367

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

Sample No. : VCP432204

Lab Number : 06084573

Unique Number : 10872018

Test Package : MOB 1 ( Additional Tests: TBN )

Received : 09 Feb 2024

Tested : 12 Feb 2024

Diagnosed : 12 Feb 2024 - Don Baldrige

SAIIA CONSTRUCTION LLC

4400 LEWISBURG RD

BIRMINGHAM, AL

US 35207

Contact: STEPHANI BRITTON

sbritton@saiia.com;doug.bogart@wearcheck.com

T: (205)943-2268

F: (205)943-2269

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)