



# OIL ANALYSIS REPORT

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

Area

**AMR-Manchester**

Machine Id

**625478 VOLVO L90H 625478**

Component

**Diesel Engine**

Fluid

**CHEVRON 15W40 (--- GAL)**



## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ023642</b>	DJJ0019237	DJJ0019227
Sample Date		Client Info		<b>11 Apr 2024</b>	26 Feb 2024	03 Jan 2024
Machine Age	hrs	Client Info		<b>9086</b>	8821	8522
Oil Age	hrs	Client Info		<b>500</b>	0	8522
Filter Age	hrs	Client Info		<b>500</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	>200	<b>2</b>	6	3
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>30	<b>4</b>	9	4
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

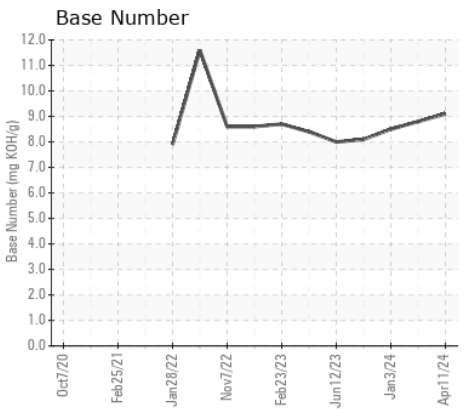
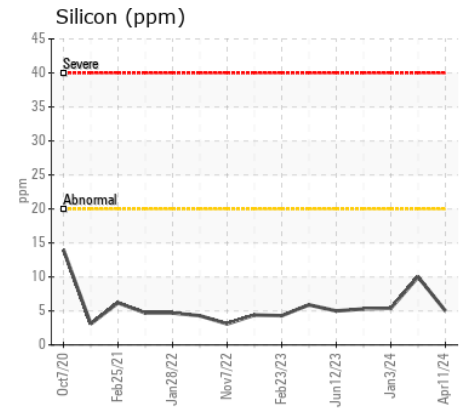
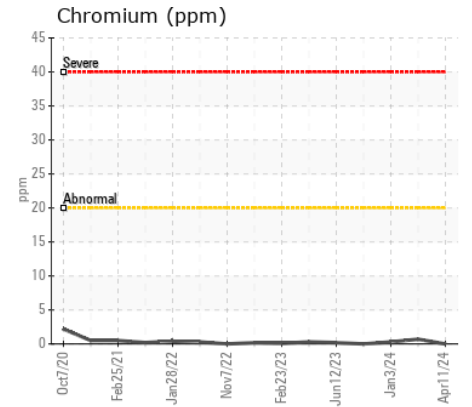
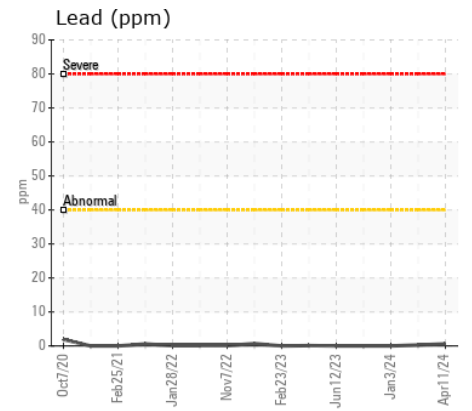
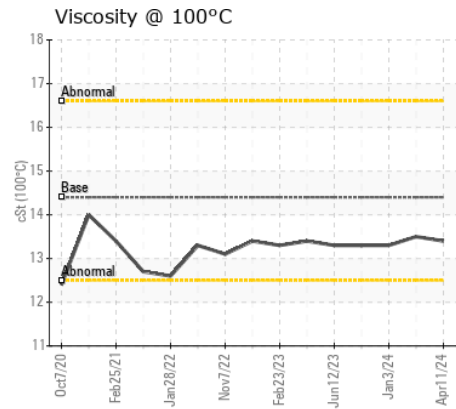
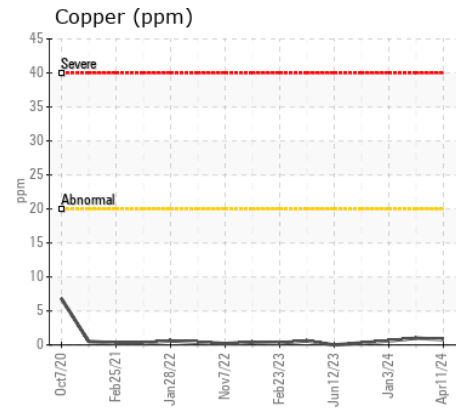
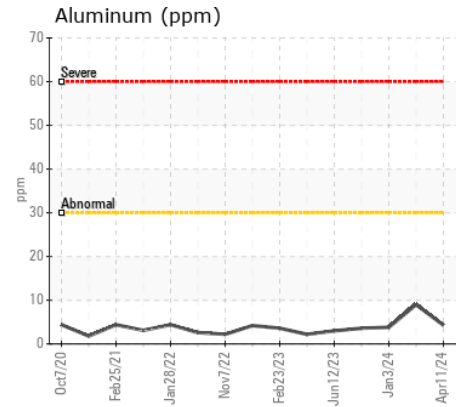
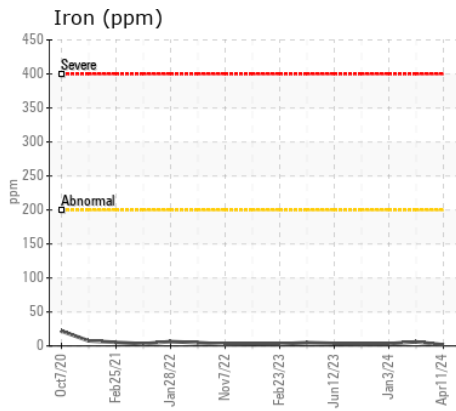
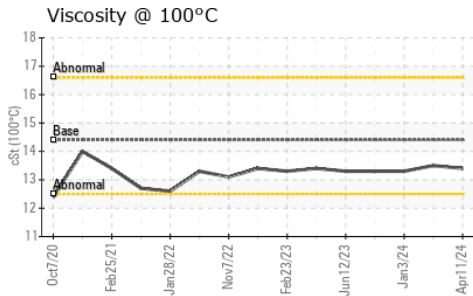
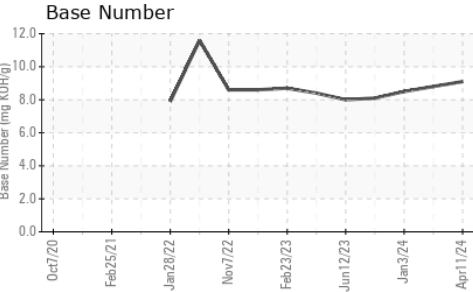
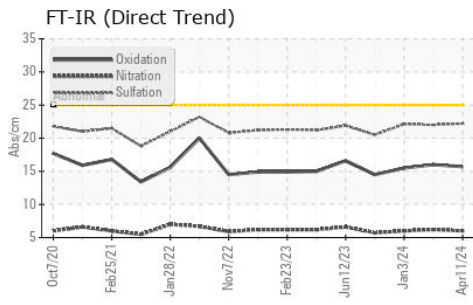
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	10	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.0</b>	6.2	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.2</b>	22.0	22.1
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	>0.2	<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	>50	<b>3</b>	3	0
Boron	ppm	ASTM D5185m		<b>447</b>	593	360
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>117</b>	182	112
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>634</b>	928	570
Calcium	ppm	ASTM D5185m		<b>1445</b>	2163	1351
Phosphorus	ppm	ASTM D5185m		<b>807</b>	1144	750
Zinc	ppm	ASTM D5185m		<b>899</b>	1304	853
Sulfur	ppm	ASTM D5185m		<b>3155</b>	4251	2724
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	16.0	15.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.1</b>	8.8	8.5
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.4</b>	13.5	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ023642 **Received** : 18 Apr 2024  
**Lab Number** : 06153586 **Tested** : 19 Apr 2024  
**Unique Number** : 10983664 **Diagnosed** : 19 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**ADVANTAGE METALS RECYCLING - MANCHESTER**  
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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)