

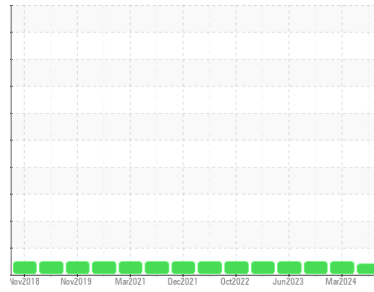


# OIL ANALYSIS REPORT



Area  
**[W/O 10848]**  
 Machine Id  
**VOLVO L90H 623915**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON 15W40 (5 GAL)**

### Sample Rating Trend



### VISCOSITY



### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

#### Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>ML0001276</b>	ML0000067	VCP413935
Sample Date	Client Info		<b>28 May 2024</b>	18 Mar 2024	18 Oct 2023
Machine Age	hrs	Client Info	<b>11224</b>	10883	10514
Oil Age	hrs	Client Info	<b>341</b>	369	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ATTENTION</b>	NORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>3</b>	6	2
Chromium	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	2	3
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>4</b>	6	3
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
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>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>205</b>	380	336
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>83</b>	92	85
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>558</b>	412	409
Calcium	ppm	ASTM D5185m	<b>1416</b>	1442	1350
Phosphorus	ppm	ASTM D5185m	<b>895</b>	1071	977
Zinc	ppm	ASTM D5185m	<b>1025</b>	1279	1257
Sulfur	ppm	ASTM D5185m	<b>3166</b>	4043	3312

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>5</b>	4	5
Sodium	ppm	ASTM D5185m >50	<b>1</b>	2	3
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Fuel	%	ASTM D3524 >6.0	<b>2.1</b>	<1.0	<1.0

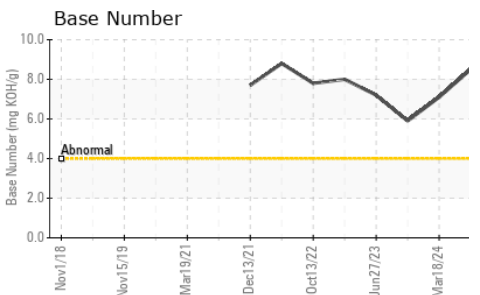
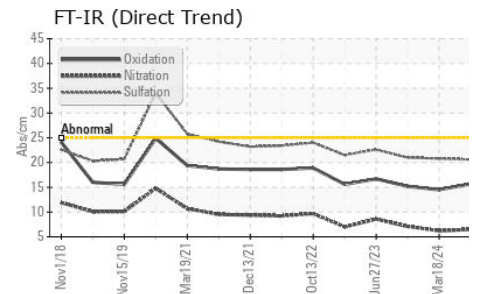
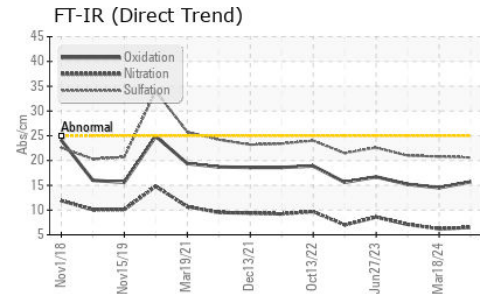
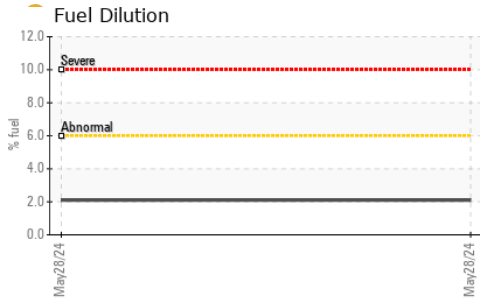
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.5</b>	6.2	7.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.6</b>	20.8	21.0

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.7</b>	14.5	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	<b>8.5</b>	7.1	5.9

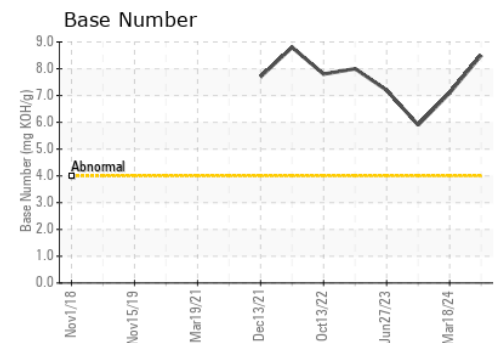
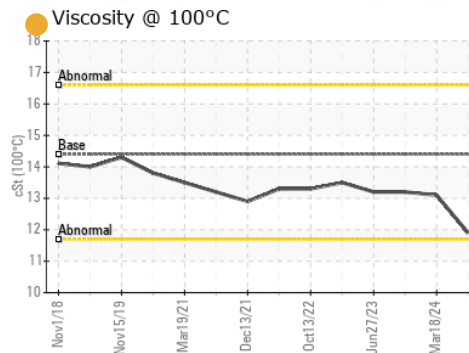
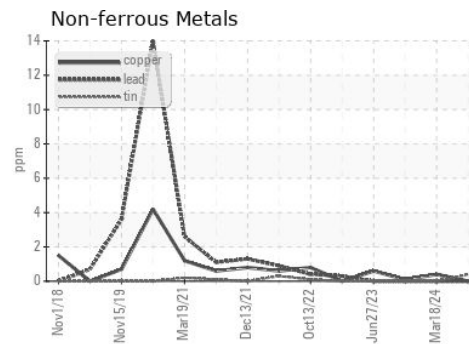
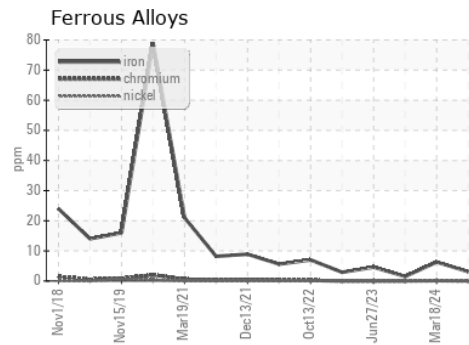
# OIL ANALYSIS REPORT



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	14.4 ● 11.9	13.1	13.2

## GRAPHS



Certificate L2367

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

**Sample No.** : ML0001276

**Lab Number** : 06196244

**Unique Number** : 11058367

**Test Package** : CONST ( Additional Tests: FUELDILUTION, PercentFuel, TBN )

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)

**Received** : 31 May 2024

**Tested** : 05 Jun 2024

**Diagnosed** : 05 Jun 2024 - Don Baldrige

**McCLUNG-LOGAN EQUIPMENT CO - BALTIMORE**

4601 WASHINGTON BOULEVARD

BALTIMORE, MD

US 21227

Contact: MARK CIULLA

mciulla@mcclung-logan.com

T: (410)242-6500

F: (410)242-7835