



# OIL ANALYSIS REPORT

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



Area  
**UPAP-Phoenix [SW1027118]**  
Machine Id  
**330144 VOLVO L90G 617701**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCE196220</b>	DJJ025952	DJJ0005911
Sample Date		Client Info		<b>21 Dec 2023</b>	10 May 2023	21 Jun 2022
Machine Age	hrs	Client Info		<b>11267</b>	10493	9277
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>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>8</b>	9	6
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>30	<b>5</b>	4	4
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>20	<b>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

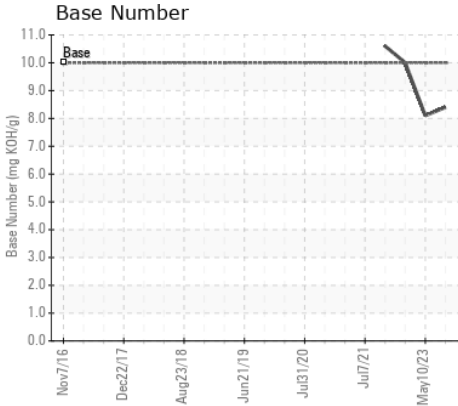
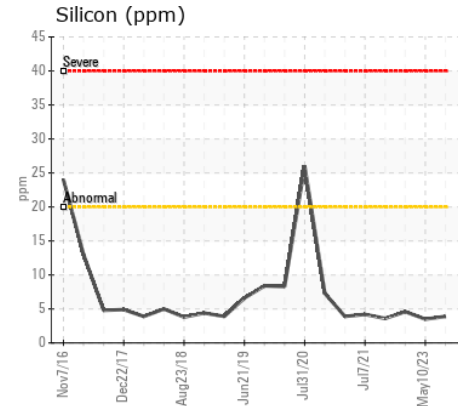
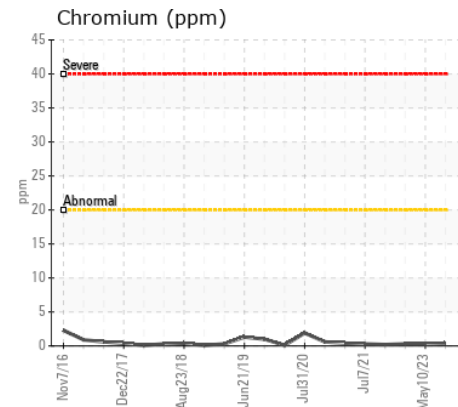
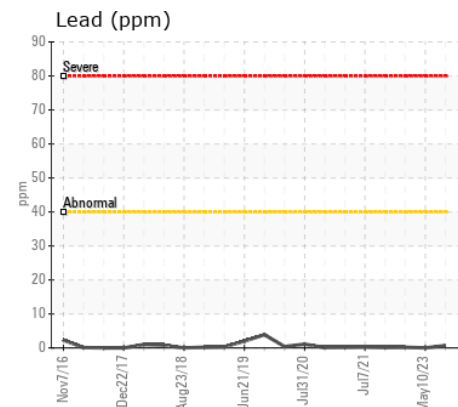
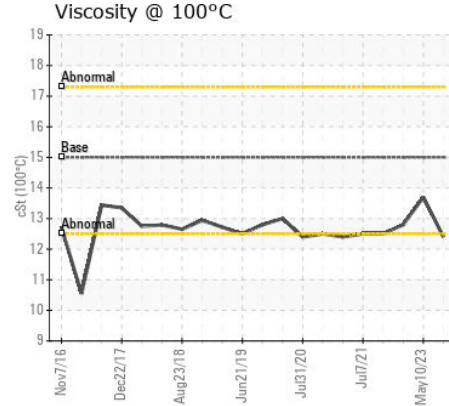
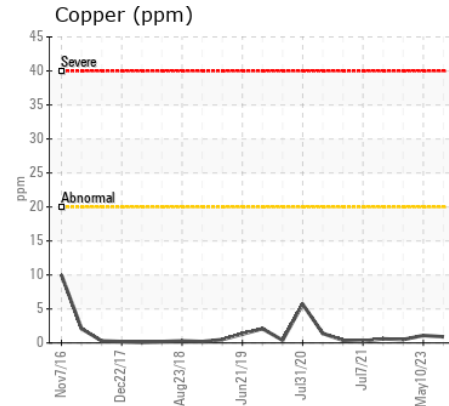
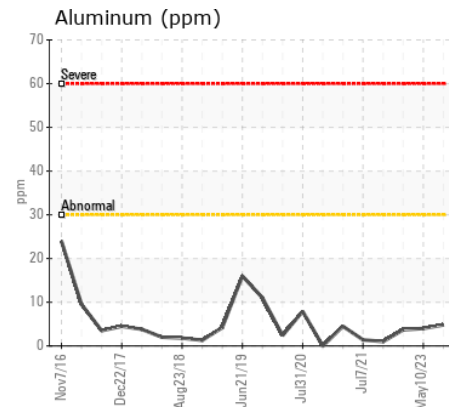
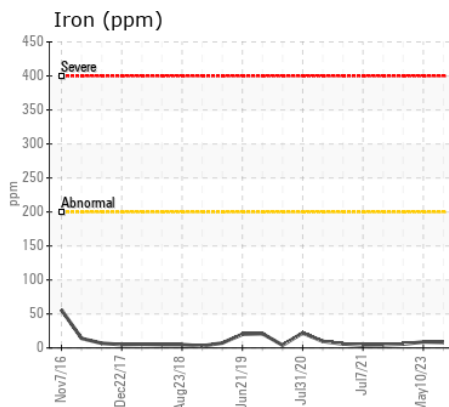
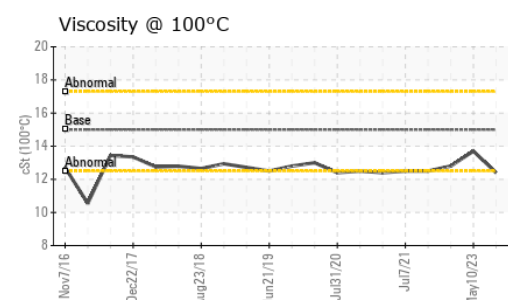
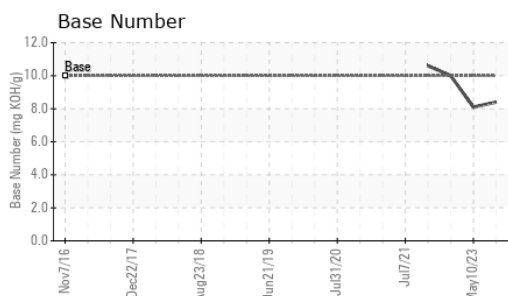
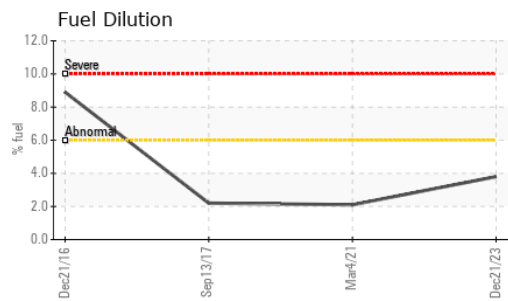
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Fuel	%	ASTM D3524	>6.0	<b>3.8</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>0.4</b>	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.3</b>	8.2	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.2</b>	18.8	21.4
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	>0.2	<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		<b>&lt;1</b>	2	2
Boron	ppm	ASTM D5185m	2.5	<b>8</b>	2	48
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>55</b>	59	40
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	256	<b>895</b>	964	486
Calcium	ppm	ASTM D5185m	2057	<b>1281</b>	1126	1646
Phosphorus	ppm	ASTM D5185m	935	<b>1082</b>	1016	895
Zinc	ppm	ASTM D5185m	1223	<b>1302</b>	1271	1137
Sulfur	ppm	ASTM D5185m	4079	<b>3318</b>	3410	2772
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	15.4	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>8.4</b>	8.1	10.0
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.4</b>	13.7	12.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCE196220 **Received** : 29 Dec 2023  
**Lab Number** : 06047483 **Diagnosed** : 08 Jan 2024  
**Unique Number** : 10808091 **Diagnostician** : Doug Bogart  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

**U-PULL-AND-PAY LLC - PHOENIX**  
 2501 WEST BUCKEYE RD  
 PHOENIX, AZ  
 US 85009  
 Contact: CASEY MILLER  
 casey.miller@upullandpay.com  
 T:  
 F: (602)233-3971

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)