



# CONSTRUCTION EQUIPMENT

## VOLVO A45G 353298 - DIESEL ENGINE



**Sample No:** VCP409137  
**Oil Type:** MOBIL DELVAC 1300 SUPER15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP409137</b>	VCP399778	VCP409127	VCP396798
Sample Date	<b>21 Nov 2023</b>	18 Sep 2023	05 Jul 2023	22 Mar 2023
Machine Hours	<b>2027</b>	1722	1328	757
Oil Hours	<b>300</b>	500	500	300
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	ABNORMAL	ATTENTION

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### OIL CONDITION

Visc @ 100°C	cSt	█ <b>12.9</b>	█ 12.6	█ 12.7	▲ 12.2
Base Number (BN)	mg KOH/g	█ <b>8.5</b>	█ 8.1	█ 6.2	█ 7.6
Oxidation (PA)	%	<b>63</b>	63	65	65

### Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Valve wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	█ <b>0.3</b>	█ 0.3	█ 0.4	█ 0.3
Nitration (PA)	%	<b>72</b>	77	88	77
Sulfation (PA)	%	<b>55</b>	56	63	58
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	█ 1.6
Silicon	ppm	█ <b>5</b>	█ 5	█ 6	█ 10
Sodium	ppm	█ <b>2</b>	█ 2	█ 2	█ 3
Potassium	ppm	█ <b>2</b>	█ 4	█ 4	█ 0



### WEAR METALS

Iron	ppm	█ <b>7</b>	█ 8	█ 15	█ 12
Copper	ppm	█ <b>&lt;1</b>	█ 3	█ 14	█ 55
Lead	ppm	█ <b>0</b>	█ <1	█ 1	█ 0
Tin	ppm	█ <b>0</b>	█ <1	█ 1	█ 1
Aluminum	ppm	█ <b>1</b>	█ 2	█ 2	█ 1
Chromium	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Molybdenum	ppm	█ <b>13</b>	█ 13	█ 9	█ 30
Nickel	ppm	▲ <b>6</b>	█ 3	▲ 5	█ 2
Titanium	ppm	<b>0</b>	<1	<1	0
Silver	ppm	█ <b>0</b>	█ 0	█ 0	█ 0
Manganese	ppm	█ <b>&lt;1</b>	█ 0	█ <1	█ 1
Vanadium	ppm	<b>0</b>	<1	<1	0



### ADDITIVES

Calcium	ppm	█ <b>1373</b>	█ 1400	█ 1416	█ 1794
Magnesium	ppm	█ <b>614</b>	█ 612	█ 635	█ 491
Zinc	ppm	█ <b>851</b>	█ 846	█ 860	█ 951
Phosphorus	ppm	█ <b>749</b>	█ 714	█ 694	█ 820
Barium	ppm	█ <b>0</b>	█ <1	█ <1	█ 0
Boron	ppm	█ <b>55</b>	█ 40	█ 27	█ 56

**Depot:** DUNBEL  
**Unique No:** 10765411  
**Signed:** Don Baldrige  
**Report Date:** 03 Dec 2023



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## VOLVO GRAPHS

