



# CONSTRUCTION EQUIPMENT

## VOLVO A45GFS 352516 - DIESEL ENGINE



**Sample No:** VCP409128  
**Oil Type:** MOBIL DELVAC 1300 SUPER15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP409128</b>	VCP373580	VCP365373	VCP357232
Sample Date	<b>05 Jul 2023</b>	22 Mar 2023	03 Jan 2023	20 Sep 2022
Machine Hours	<b>3781</b>	3222	2872	2383
Oil Hours	<b>500</b>	350	440	400
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	13.2	13.5	13.3
Base Number (BN)	mg KOH/g	<b>7.1</b>	8.6	7.6	8.8
Oxidation (PA)	%	<b>62</b>	65	69	72

### Diagnosis

Resample at the next service interval to monitor. All 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

Soot %	%	<b>0.5</b>	0.3	0.5	0.5
Nitration (PA)	%	<b>88</b>	77	90	93
Sulfation (PA)	%	<b>61</b>	57	60	63
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	4	5	6
Sodium	ppm	<b>2</b>	2	3	3
Potassium	ppm	<b>4</b>	<1	<1	<1



### WEAR METALS

Iron	ppm	<b>11</b>	12	10	7
Copper	ppm	<b>1</b>	2	2	6
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>3</b>	2	2	2
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>8</b>	20	18	19
Nickel	ppm	<b>3</b>	5	3	3
Titanium	ppm	<b>&lt;1</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>0</b>	1	<1	1
Vanadium	ppm	<b>&lt;1</b>	0	0	1



### ADDITIVES

Calcium	ppm	<b>1480</b>	1567	1555	1461
Magnesium	ppm	<b>665</b>	626	633	693
Zinc	ppm	<b>899</b>	879	846	932
Phosphorus	ppm	<b>735</b>	754	705	818
Barium	ppm	<b>&lt;1</b>	0	0	0
Boron	ppm	<b>38</b>	64	38	31

**Depot:** DUNBEL  
**Unique No:** 10701748  
**Signed:** Wes Davis  
**Report Date:** 20 Oct 2023



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## GRAPHS

