



# CONSTRUCTION EQUIPMENT

## VOLVO A45GFS 352516 - DIESEL ENGINE



**Sample No:** VCP382713  
**Oil Type:** MOBIL DELVAC 1300 SUPER15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP382713</b>	VCP409156	VCP409128	VCP373580
Sample Date	<b>21 Nov 2023</b>	18 Sep 2023	05 Jul 2023	22 Mar 2023
Machine Hours	<b>4618</b>	4264	3781	3222
Oil Hours	<b>400</b>	500	500	350
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>13.5</b>	13.2	13.1	13.2
Base Number (BN)	mg KOH/g	<b>7.7</b>	7.8	7.1	8.6
Oxidation (PA)	%	<b>64</b>	63	62	65

### 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

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.5</b>	0.5	0.5	0.3
Nitration (PA)	%	<b>83</b>	82	88	77
Sulfation (PA)	%	<b>58</b>	58	61	57
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	4	5	4
Sodium	ppm	<b>2</b>	1	2	2
Potassium	ppm	<b>2</b>	4	4	<1



### WEAR METALS

Iron	ppm	<b>10</b>	8	11	12
Copper	ppm	<b>&lt;1</b>	<1	1	2
Lead	ppm	<b>0</b>	<1	<1	0
Tin	ppm	<b>&lt;1</b>	<1	<1	0
Aluminum	ppm	<b>3</b>	3	3	2
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>15</b>	13	8	20
Nickel	ppm	<b>2</b>	1	3	5
Titanium	ppm	<b>0</b>	<1	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	0	0	1
Vanadium	ppm	<b>0</b>	<1	<1	0



### ADDITIVES

Calcium	ppm	<b>1379</b>	1476	1480	1567
Magnesium	ppm	<b>644</b>	646	665	626
Zinc	ppm	<b>884</b>	894	899	879
Phosphorus	ppm	<b>756</b>	748	735	754
Barium	ppm	<b>0</b>	<1	<1	0
Boron	ppm	<b>36</b>	39	38	64

**Depot:** DUNBEL  
**Unique No:** 10765408  
**Signed:** Wes Davis  
**Report Date:** 30 Nov 2023



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## GRAPHS

