



# CONSTRUCTION EQUIPMENT

## VOLVO A45GFS 352516 - DIESEL ENGINE



**Sample No:** VCP409156  
**Oil Type:** MOBIL DELVAC 1300 SUPER15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP409156</b>	VCP409128	VCP373580	VCP365373
Sample Date	<b>18 Sep 2023</b>	05 Jul 2023	22 Mar 2023	03 Jan 2023
Machine Hours	<b>4264</b>	3781	3222	2872
Oil Hours	<b>500</b>	500	350	440
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**DUNN CONSTRUCTION INC**  
 318 N 14TH ST  
 BELLEVUE, IA  
 US 52031  
 Contact: STEVE DUNN  
 DUNNCONSTRUCTINC@GMAIL.COM  
 T:  
 F:



### OIL CONDITION

Visc @ 100°C	cSt	█ <b>13.2</b>	█ 13.1	█ 13.2	█ 13.5
Base Number (BN)	mg KOH/g	█ <b>7.8</b>	█ 7.1	█ 8.6	█ 7.6
Oxidation (PA)	%	█ <b>63</b>	█ 62	█ 65	█ 69

### 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>	█ 0.5	█ 0.3	█ 0.5
Nitration (PA)	%	█ <b>82</b>	█ 88	█ 77	█ 90
Sulfation (PA)	%	█ <b>58</b>	█ 61	█ 57	█ 60
Glycol	%	█ <b>NEG</b>	█ NEG	█ NEG	█ NEG
Fuel	%	█ <b>&lt;1.0</b>	█ <1.0	█ <1.0	█ <1.0
Silicon	ppm	█ <b>4</b>	█ 5	█ 4	█ 5
Sodium	ppm	█ <b>1</b>	█ 2	█ 2	█ 3
Potassium	ppm	█ <b>4</b>	█ 4	█ <1	█ <1



### WEAR METALS

Iron	ppm	█ <b>8</b>	█ 11	█ 12	█ 10
Copper	ppm	█ <b>&lt;1</b>	█ 1	█ 2	█ 2
Lead	ppm	█ <b>&lt;1</b>	█ <1	█ 0	█ <1
Tin	ppm	█ <b>&lt;1</b>	█ <1	█ 0	█ <1
Aluminum	ppm	█ <b>3</b>	█ 3	█ 2	█ 2
Chromium	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Molybdenum	ppm	█ <b>13</b>	█ 8	█ 20	█ 18
Nickel	ppm	█ <b>1</b>	█ 3	█ 5	█ 3
Titanium	ppm	█ <b>&lt;1</b>	█ <1	█ 0	█ 0
Silver	ppm	█ <b>0</b>	█ 0	█ 0	█ 0
Manganese	ppm	█ <b>0</b>	█ 0	█ 1	█ <1
Vanadium	ppm	█ <b>&lt;1</b>	█ <1	█ 0	█ 0



### ADDITIVES

Calcium	ppm	█ <b>1476</b>	█ 1480	█ 1567	█ 1555
Magnesium	ppm	█ <b>646</b>	█ 665	█ 626	█ 633
Zinc	ppm	█ <b>894</b>	█ 899	█ 879	█ 846
Phosphorus	ppm	█ <b>748</b>	█ 735	█ 754	█ 705
Barium	ppm	█ <b>&lt;1</b>	█ <1	█ 0	█ 0
Boron	ppm	█ <b>39</b>	█ 38	█ 64	█ 38

**Depot:** DUNBEL  
**Unique No:** 10701747  
**Signed:** Wes Davis  
**Report Date:** 20 Oct 2023



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## GRAPHS

