



# CONSTRUCTION EQUIPMENT

## VOLVO A40G 352351 - DIESEL ENGINE



**Sample No:** VCP331577  
**Oil Type:** MOBIL 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	VCP331577	VCP331549	VCP339693	VCP406109
Sample Date	11 Dec 2023	07 Nov 2023	03 Oct 2023	24 Aug 2023
Machine Hours	7971	7750	7502	7188
Oil Hours	221	248	314	302
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

**SCHILDBERG CONSTRUCTION COMPANY**  
 PO BOX 358  
 GREENFIELD, IA  
 US 50849  
 Contact: SCOTT ARMSTRONG  
 sarmstrong@schildberg.com  
 T: (641)743-8237  
 F: (641)743-2486



### OIL CONDITION

Visc @ 100°C	cSt	12.8	12.7	12.6	12.3
Base Number (BN)	mg KOH/g	6.6	6.8	7.9	10.2
Oxidation (PA)	%	59	62	67	80



### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	68	70	62	53
Sulfation (PA)	%	49	51	53	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	7	5	6
Sodium	ppm	4	4	4	5
Potassium	ppm	3	2	2	2



### WEAR METALS

Iron	ppm	2	2	3	4
Copper	ppm	0	<1	<1	0
Lead	ppm	0	0	0	0
Tin	ppm	0	0	<1	<1
Aluminum	ppm	4	3	4	1
Chromium	ppm	<1	0	<1	<1
Molybdenum	ppm	119	118	84	37
Nickel	ppm	<1	0	<1	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	0	<1
Vanadium	ppm	0	<1	0	0



### ADDITIVES

Calcium	ppm	1213	1323	1422	1655
Magnesium	ppm	639	698	584	536
Zinc	ppm	837	933	890	864
Phosphorus	ppm	766	707	753	736
Barium	ppm	0	0	0	2
Boron	ppm	124	120	79	50

### 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 acceptable for the time in service.

**Depot:** SCHGRE  
**Unique No:** 10806389  
**Signed:** Don Baldrige  
**Report Date:** 28 Dec 2023



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## GRAPHS

