



CONSTRUCTION EQUIPMENT

SW1027987 DIAMOND VOLVO A40D 60013 - REAR LEFT FINAL DRIVE



Sample No: VCP369192
Oil Type: GEAR OIL SAE 80W90
Job No: SW1027987 DIAMOND



SAMPLE INFORMATION

Sample Number	VCP369192	VC043181	VC016252	---
Sample Date	20 Dec 2023	14 Mar 2003	20 Aug 2002	---
Machine Hours	4671	2053	1379	---
Oil Hours	0	674	1379	---
Oil Changed	Changed	Not Chngd	Changed	---
Sample Status	ABNORMAL	ABNORMAL	NORMAL	---

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OIL CONDITION

Visc @ 40°C	cSt	▲ 333	▲ 136.8	136.5	---
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CONTAMINATION

Water	%	NEG	NEG	NEG	---
Silicon	ppm	▲ 81	■ 14	■ 27	---
Sodium	ppm	■ 2	■ 2	■ 3	---
Potassium	ppm	■ 9	■ 0	■ 15	---

Diagnosis

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is higher than normal. Confirm oil type.



WEAR METALS

Iron	ppm	■ 797	■ 456	■ 466	---
Copper	ppm	■ 7	■ 13	■ 16	---
Lead	ppm	■ 0	■ <1	■ 1	---
Tin	ppm	■ 0	■ 0	■ 0	---
Aluminum	ppm	▲ 13	■ <1	■ 5	---
Chromium	ppm	■ 13	■ 7	■ 8	---
Molybdenum	ppm	■ 2	0	0	---
Nickel	ppm	■ 5	■ 4	■ 6	---
Titanium	ppm	1	■ <1	■ <1	---
Silver	ppm	0	■ 0	■ 0	---
Manganese	ppm	■ 11	9	10	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	■ 88	16	31	---
Magnesium	ppm	■ 11	1	3	---
Zinc	ppm	■ 28	12	19	---
Phosphorus	ppm	■ 976	688	642	---
Barium	ppm	■ 0	<1	<1	---
Boron	ppm	■ 138	15	0	---

Depot: VOLVO6174
Unique No: 10808693
Signed: Don Baldrige
Report Date: 02 Jan 2024



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GRAPHS

