



CONSTRUCTION EQUIPMENT

ASN VOLVO A60H 350269 - DIESEL ENGINE



Sample No: VCP393192
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: ASN



SAMPLE INFORMATION

Sample Number	VCP393192	VCP401102	VCP402367	---
Sample Date	13 Jul 2023	15 Jun 2023	22 Mar 2023	---
Machine Hours	1658	1648	1054	---
Oil Hours	0	0	0	---
Oil Changed	N/A	N/A	N/A	---
Sample Status	ABNORMAL	SEVERE	SEVERE	---

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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.9	▲ 6.2	▲ 5.9	---
Base Number (BN)	mg KOH/g	■ 9.2	■ 7.4	■ 6.6	---
Oxidation (PA)	%	53	57	71	---



CONTAMINATION

Soot %	%	■ 0.1	■ 0.2	■ 0.3	---
Nitration (PA)	%	47	69	78	---
Sulfation (PA)	%	51	53	55	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	▲ 5.3	● 37.8	● 20.0	---
Silicon	ppm	■ 5	■ 2	■ 12	---
Sodium	ppm	■ 3	■ 1	■ 2	---
Potassium	ppm	■ 0	■ <1	■ 0	---

Diagnosis

We advise that you check the fuel injection system. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.



WEAR METALS

Iron	ppm	■ 2	■ 3	■ 14	---
Copper	ppm	■ 2	■ 13	■ 215	---
Lead	ppm	■ 0	■ 0	■ <1	---
Tin	ppm	■ 0	■ 0	■ 1	---
Aluminum	ppm	■ <1	■ 10	■ 0	---
Chromium	ppm	■ 0	■ 0	■ <1	---
Molybdenum	ppm	■ 73	■ 61	■ 32	---
Nickel	ppm	■ 1	■ 0	■ 1	---
Titanium	ppm	<1	0	0	---
Silver	ppm	■ 0	■ 0	■ 0	---
Manganese	ppm	■ <1	0	■ <1	---
Vanadium	ppm	<1	0	0	---



ADDITIVES

Calcium	ppm	■ 1401	■ 938	1182	---
Magnesium	ppm	■ 699	■ 435	■ 281	---
Zinc	ppm	■ 883	559	700	---
Phosphorus	ppm	■ 740	500	578	---
Barium	ppm	■ 0	■ 0	■ 0	---
Boron	ppm	■ 254	■ 111	■ 25	---

Depot: ASCFAR
Unique No: 10563371
Signed: Jonathan Hester
Report Date: 20 Jul 2023



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GRAPHS

