



CONSTRUCTION EQUIPMENT

10176 SPINELLO VOLVO ECR88D 217540 - DIESEL ENGINE



Sample No: VCP414789
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 10176 SPINELLO



SAMPLE INFORMATION

Sample Number	VCP414789	VCP423103	VCP386410	---
Sample Date	04 Jan 2024	23 May 2023	27 Jan 2023	---
Machine Hours	1496	1024	666	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	ABNORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	13.5	13.8	13.6	---
Base Number (BN)	mg KOH/g	6.4	7.7	6.2	---
Oxidation (PA)	%	80	73	73	---

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	%	NEG	NEG	NEG	---
Soot %	%	0.4	0.3	0.3	---
Nitration (PA)	%	79	68	83	---
Sulfation (PA)	%	69	64	62	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	9	7	11	---
Sodium	ppm	4	3	4	---
Potassium	ppm	1	1	<1	---



WEAR METALS

Iron	ppm	19	12	27	---
Copper	ppm	3	14	153	---
Lead	ppm	0	0	0	---
Tin	ppm	0	<1	1	---
Aluminum	ppm	5	4	4	---
Chromium	ppm	<1	<1	1	---
Molybdenum	ppm	104	87	16	---
Nickel	ppm	0	0	0	---
Titanium	ppm	0	1	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	0	<1	2	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	1489	1437	2308	---
Magnesium	ppm	462	623	168	---
Zinc	ppm	1377	1254	1056	---
Phosphorus	ppm	1075	1031	853	---
Barium	ppm	0	0	2	---
Boron	ppm	307	254	9	---

Depot: VOLVO0150
Unique No: 10822261
Signed: Angela Borella
Report Date: 11 Jan 2024



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GRAPHS

