



CONSTRUCTION EQUIPMENT

SW30146 VOLVO ECR235E 314278 - DIESEL ENGINE



Sample No: VCP439429
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW30146



SAMPLE INFORMATION

Sample Number	VCP439429	VCP419575	VCP412327	---
Sample Date	20 Feb 2024	16 Dec 2023	15 Jul 2023	---
Machine Hours	2417	2210	1700	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	13.9	14.1	13.5	---
Base Number (BN)	mg KOH/g	9.4	7.8	9.1	---
Oxidation (PA)	%	73	111	84	---

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 %	%	0.1	0.2	0.2	---
Nitration (PA)	%	70	101	76	---
Sulfation (PA)	%	57	68	61	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	3	6	9	---
Sodium	ppm	0	3	2	---
Potassium	ppm	0	0	<1	---



WEAR METALS

Iron	ppm	3	18	15	---
Copper	ppm	0	1	1	---
Lead	ppm	0	<1	0	---
Tin	ppm	0	<1	2	---
Aluminum	ppm	2	2	4	---
Chromium	ppm	<1	1	1	---
Molybdenum	ppm	58	41	64	---
Nickel	ppm	0	0	<1	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	1240	1814	1783	---
Magnesium	ppm	918	531	653	---
Zinc	ppm	1294	1176	1360	---
Phosphorus	ppm	985	890	1113	---
Barium	ppm	<1	<1	1	---
Boron	ppm	3	27	89	---

Depot: VOLVO6174
Unique No: 10898174
Signed: Don Baldrige
Report Date: 28 Feb 2024



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GRAPHS

