



CONSTRUCTION EQUIPMENT

1412 RIO BRAVO ROCKL VOLVO L220H 3318 - DIESEL ENGINE



Sample No: VCP431002
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 1412 RIO BRAVO ROCKL



SAMPLE INFORMATION

Sample Number	VCP431002	VCP308187	---	---
Sample Date	07 Dec 2023	10 Oct 2022	---	---
Machine Hours	1525	1167	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

VCES- VOLVO CONSTRUCTION EQUIPMENT

8594 FRUITRIDGE ROAD
 SACRAMENTO, CA
 US 95826
 Contact: RAY KRANZUSCH
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 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	12.7	12.9	---	---
Base Number (BN)	mg KOH/g	9.8	10.7	---	---
Oxidation (PA)	%	85	91	---	---

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	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	60	68	---	---
Sulfation (PA)	%	62	67	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	5	8	---	---
Sodium	ppm	2	3	---	---
Potassium	ppm	1	<1	---	---



WEAR METALS

Iron	ppm	3	7	---	---
Copper	ppm	2	7	---	---
Lead	ppm	0	1	---	---
Tin	ppm	1	2	---	---
Aluminum	ppm	2	2	---	---
Chromium	ppm	0	<1	---	---
Molybdenum	ppm	39	40	---	---
Nickel	ppm	2	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	1651	1843	---	---
Magnesium	ppm	495	498	---	---
Zinc	ppm	1160	1132	---	---
Phosphorus	ppm	992	949	---	---
Barium	ppm	0	0	---	---
Boron	ppm	49	45	---	---

Depot: VOLVO4485
Unique No: 10794203
Signed: Wes Davis
Report Date: 20 Dec 2023



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GRAPHS

