



CONSTRUCTION EQUIPMENT

W07014112 VOLVO L220H 3091 - DIESEL ENGINE



Sample No: VCP409436
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: W07014112



SAMPLE INFORMATION

Sample Number	VCP409436	VCP222093	VCP263205	---
Sample Date	10 Jan 2024	08 Jun 2020	01 Apr 2020	---
Machine Hours	11633	3208	3160	---
Oil Hours	0	100	226	---
Oil Changed	N/A	Not Changd	Not Changd	---
Sample Status	NORMAL	NORMAL	SEVERE	---

MORGAN LUMBER
 628 JEB STUART HWY
 RED OAK, VA
 US 23964
 Contact: Service Manager



OIL CONDITION

Visc @ 100°C	cSt	13.9	13.7	14.2	---
Base Number (BN)	mg KOH/g	7.7	---	---	---
Oxidation (PA)	%	64	61	59	---

T:
F:

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	0.1	0.1	---
Nitration (PA)	%	69	41	58	---
Sulfation (PA)	%	55	55	55	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	5	20	45	---
Sodium	ppm	3	2	7	---
Potassium	ppm	1	3	11	---



WEAR METALS

Iron	ppm	4	52	48	---
Copper	ppm	<1	6	19	---
Lead	ppm	0	<1	11	---
Tin	ppm	<1	<1	0	---
Aluminum	ppm	1	2	29	---
Chromium	ppm	0	<1	<1	---
Molybdenum	ppm	17	34	4	---
Nickel	ppm	0	<1	2	---
Titanium	ppm	62	24	86	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	3	2	---
Vanadium	ppm	<1	0	0	---



ADDITIVES

Calcium	ppm	1797	1551	1936	---
Magnesium	ppm	418	361	455	---
Zinc	ppm	1217	986	1169	---
Phosphorus	ppm	1029	938	1022	---
Barium	ppm	0	0	0	---
Boron	ppm	109	55	110	---

Depot: MORREDVA
Unique No: 10833691
Signed: Wes Davis
Report Date: 18 Jan 2024



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GRAPHS

