



CONSTRUCTION EQUIPMENT

64291 MID SOUTH PAV VOLVO L150H 5199 - DIESEL ENGINE



Sample No: VCP416185
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 64291 MID SOUTH PAV



SAMPLE INFORMATION

Sample Number	VCP416185	VCP356833	VCE172195	VCP203642
Sample Date	21 Jul 2023	13 Apr 2022	13 Jun 2017	20 Feb 2017
Machine Hours	9100	7530	1511	1009
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	ABNORMAL

COWIN EQUIPMENT COMPANY INC - GUNTERSVILLE
 15101 ALABAMA HWY 20
 MADISON, AL
 US 35756
 Contact: RANDY HARRIS
 RHARRIS@COWIN.COM
 T: (256)298-2322
 F: (256)355-5250



OIL CONDITION

Visc @ 100°C	cSt	13.0	13.4	13.03	13.64
Base Number (BN)	mg KOH/g	10.0	10.4	---	---
Oxidation (PA)	%	80	80	64	60



CONTAMINATION

Soot %	%	0.1	0.1	0	0
Nitration (PA)	%	54	70	50	58
Sulfation (PA)	%	59	62	58	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	5	8	9
Sodium	ppm	2	1	15	11
Potassium	ppm	0	2	2	1



WEAR METALS

Iron	ppm	3	5	5	7
Copper	ppm	<1	<1	▲ 133	▲ 347
Lead	ppm	0	<1	<1	0
Tin	ppm	0	<1	<1	0
Aluminum	ppm	<1	1	2	1
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	40	30	36	44
Nickel	ppm	0	0	<1	<1
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1686	1704	1418	1204
Magnesium	ppm	516	577	474	739
Zinc	ppm	1124	989	960	1004
Phosphorus	ppm	931	832	880	869
Barium	ppm	0	0	0	0
Boron	ppm	57	67	32	36

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.

Depot: COWMAD
Unique No: 10577352
Signed: Wes Davis
Report Date: 31 Jul 2023



CONSTRUCTION EQUIPMENT



GRAPHS

