



CONSTRUCTION EQUIPMENT

SW1023309 IAA 4 VOLVO L90H 617603 - DIESEL ENGINE



Sample No: VCP413309
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW1023309 IAA 4



SAMPLE INFORMATION

Sample Number	VCP413309	VCP369008	VCP369695	VCP351943
Sample Date	25 Aug 2023	02 May 2023	07 Nov 2022	07 Mar 2022
Machine Hours	14899	14394	13849	13398
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.5	13.2	12.9	12.8
Base Number (BN)	mg KOH/g	9.3	8.0	11.7	8.2
Oxidation (PA)	%	67	62	83	69



CONTAMINATION

Soot %	%	0.4	0.4	0.4	0
Nitration (PA)	%	68	64	71	80
Sulfation (PA)	%	55	48	63	57
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	5	5	7
Sodium	ppm	1	0	1	3
Potassium	ppm	0	<1	1	0



WEAR METALS

Iron	ppm	8	10	13	23
Copper	ppm	2	<1	<1	<1
Lead	ppm	0	0	0	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	<1	5	5	11
Chromium	ppm	<1	1	<1	1
Molybdenum	ppm	54	57	39	40
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1221	1197	1651	1769
Magnesium	ppm	846	954	478	574
Zinc	ppm	1252	1331	1115	1140
Phosphorus	ppm	1019	1082	916	991
Barium	ppm	0	0	0	0
Boron	ppm	0	5	30	29

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 acceptable for the time in service.

Depot: VOLVO6174
Unique No: 10630625
Signed: Sean Felton
Report Date: 05 Sep 2023



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GRAPHS

