



CONSTRUCTION EQUIPMENT

SW102175 IAA 3 VOLVO L90H 623884 - DIESEL ENGINE



Sample No: VCP417468
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW102175 IAA 3



SAMPLE INFORMATION

Sample Number	VCP417468	VCP379916	VCP307507	VCP353739
Sample Date	24 Jul 2023	09 Feb 2023	17 Oct 2022	06 Sep 2022
Machine Hours	10997	10456	10026	9826
Oil Hours	0	0	200	0
Oil Changed	Changed	Changed	Not Changd	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	14.2	14.4	14.3	12.5
Base Number (BN)	mg KOH/g	9.5	9.7	11.3	10.4
Oxidation (PA)	%	65	65	63	61



CONTAMINATION

Soot %	%	0.7	0.8	0.3	0.7
Nitration (PA)	%	65	72	52	64
Sulfation (PA)	%	54	55	57	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	7	4	5
Sodium	ppm	0	2	0	4
Potassium	ppm	2	<1	0	4

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.



WEAR METALS

Iron	ppm	14	19	6	18
Copper	ppm	1	4	3	▲ 26
Lead	ppm	<1	<1	<1	2
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	3	5	2	<1
Chromium	ppm	<1	1	<1	1
Molybdenum	ppm	59	58	53	39
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	<1



ADDITIVES

Calcium	ppm	1355	1357	1301	1662
Magnesium	ppm	832	877	841	620
Zinc	ppm	1252	1299	1245	1285
Phosphorus	ppm	1051	1040	1039	990
Barium	ppm	0	0	0	0
Boron	ppm	10	8	13	21

Depot: VOLVO6174
Unique No: 10589078
Signed: Wes Davis
Report Date: 08 Aug 2023



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GRAPHS

