



CONSTRUCTION EQUIPMENT

2523-1 VOLVO L90G 3199 - DIESEL ENGINE



Sample No: VCP408443
Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40
Job No: 2523-1



SAMPLE INFORMATION

Sample Number	VCP408443	VCP390162	VCP403079	VCP346952
Sample Date	28 Jun 2023	28 Mar 2023	19 Dec 2022	17 Feb 2022
Machine Hours	16948	16484	15806	13800
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	13.7	13.6	13.9	13.2
Base Number (BN)	mg KOH/g	8.1	7.3	7.5	9.6
Oxidation (PA)	%	64	65	88	71



CONTAMINATION

Soot %	%	0.3	0.4	1	0.4
Nitration (PA)	%	61	68	101	71
Sulfation (PA)	%	61	62	75	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	8	13	9
Sodium	ppm	1	0	10	3
Potassium	ppm	2	1	<1	0



WEAR METALS

Iron	ppm	22	28	76	29
Copper	ppm	1	2	5	2
Lead	ppm	0	2	15	0
Tin	ppm	<1	0	2	<1
Aluminum	ppm	9	9	20	23
Chromium	ppm	<1	1	3	2
Molybdenum	ppm	89	97	106	115
Nickel	ppm	0	0	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1481	1482	1678	1577
Magnesium	ppm	491	415	644	661
Zinc	ppm	1395	1163	895	878
Phosphorus	ppm	1122	1005	718	731
Barium	ppm	0	0	0	0
Boron	ppm	456	388	76	344

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: VOLVO1023
Unique No: 10548402
Signed: Don Baldrige
Report Date: 10 Jul 2023



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VOLVO GRAPHS

