



CONSTRUCTION EQUIPMENT

VOLVO A40D 13799 - DIESEL ENGINE



Sample No: VCP312836
Oil Type: MOBIL 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP312836	VCP379362	VCP377259	VCP342155
Sample Date	06 Sep 2023	26 Jun 2023	15 Mar 2023	26 Sep 2022
Machine Hours	28216	27910	27678	27430
Oil Hours	306	232	248	237
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	ABNORMAL	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.0	13.1	13.0	13.0
Base Number (BN)	mg KOH/g	10.7	9.9	10.1	11.8
Oxidation (PA)	%	78	84	78	81

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

Soot %	%	1.5	0.9	0.8	0.6
Nitration (PA)	%	59	58	57	54
Sulfation (PA)	%	65	65	65	66
Glycol	%	NEG	NEG	0.0	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	19	22	27	21
Sodium	ppm	2	6	0	5
Potassium	ppm	3	5	3	<1



WEAR METALS

Iron	ppm	29	35	29	26
Copper	ppm	2	1	2	1
Lead	ppm	1	0	1	2
Tin	ppm	<1	<1	0	<1
Aluminum	ppm	6	5	5	4
Chromium	ppm	2	2	2	2
Molybdenum	ppm	42	43	43	38
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	1
Vanadium	ppm	0	0	0	<1



ADDITIVES

Calcium	ppm	1625	1802	1712	1642
Magnesium	ppm	487	541	471	498
Zinc	ppm	918	987	861	883
Phosphorus	ppm	736	810	745	702
Barium	ppm	0	0	0	0
Boron	ppm	43	55	60	48

Depot: SCHGRE
Unique No: 10671661
Signed: Wes Davis
Report Date: 02 Oct 2023



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VOLVO GRAPHS

