



CONSTRUCTION EQUIPMENT

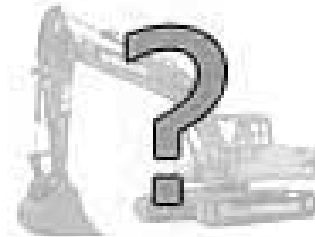
VOLVO L350 I 138 - DIESEL ENGINE



Sample No: VCP117501

Oil Type: SAE 15W40

Job No:



SAMPLE INFORMATION

Sample Number	VCP117501	VCP120664	VCP111041	VCP107960
Sample Date	30 May 2012	09 Oct 2011	02 Nov 2010	30 Aug 2010
Machine Hours	4310	3795	2589	1806
Oil Hours	0	0	500	0
Oil Changed	Changed	N/A	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ALTA EQUIPMENT COMPANY - METRO WEST
 56195 PONTIAC TRAIL
 NEW HUDSON, MI
 US 48165
 Contact: PAUL ELZERMAN
 paul.elzerman@altaequipment.com
 T: (248)356-5200
 F: (248)356-2029



OIL CONDITION

Visc @ 100°C	cSt	12.59	12.97	14.56	14.07
Oxidation (PA)	%	24	52	52	48



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.3	1.3	1.1	1.1
Nitration (PA)	%	33	75	67	58
Sulfation (PA)	%	30	58	58	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	4	3	5
Sodium	ppm	4	2	4	4
Potassium	ppm	0	<1	<1	0

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	60	53	66	47
Copper	ppm	4	4	5	13
Lead	ppm	4	5	4	1
Tin	ppm	0	2	3	0
Aluminum	ppm	1	2	1	1
Chromium	ppm	2	2	2	1
Molybdenum	ppm	58	49	5	23
Nickel	ppm	2	2	4	4
Titanium	ppm	<1	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	1	1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1408	1236	1701	1538
Magnesium	ppm	1042	773	822	559
Zinc	ppm	1381	1140	1222	1059
Phosphorus	ppm	1213	994	1023	924
Barium	ppm	0	0	0	0
Boron	ppm	6	6	5	4

Depot: VOLVO2990
Unique No: 5936535
Signed: Elizabeth Valachovic
Report Date: 08 Jun 2012



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GRAPHS

