



CONSTRUCTION EQUIPMENT

RA47 VOLVO A40G 352354 - DIESEL ENGINE



Sample No: VCP435140
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: RA47



SAMPLE INFORMATION

Sample Number	VCP435140	VCP374264	VCP320260	VCP317444
Sample Date	16 Nov 2023	13 May 2022	02 Feb 2022	27 Aug 2021
Machine Hours	5488	2827	2226	1496
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

HOUSBY HEAVY EQUIPMENT, LLC
 4410 SE 4 MILE DR
 ANKENY, IA
 US 50021
 Contact: RANDY VANDERLEEST
 rvanderleest@housby.com
 T:
 F: (515)964-2865

OIL CONDITION

Visc @ 100°C	cSt	12.7	13.2	12.7	12.5
Base Number (BN)	mg KOH/g	8.7	8.9	10.1	---
Oxidation (PA)	%	77	78	91	81

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.3	0.3	0.3	0.2
Nitration (PA)	%	65	73	83	59
Sulfation (PA)	%	60	60	67	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	6	7	6
Sodium	ppm	2	2	1	2
Potassium	ppm	0	11	0	18

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	6	14	11	6
Copper	ppm	<1	2	2	2
Lead	ppm	0	<1	<1	1
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	5	3	2	1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	57	44	43	41
Nickel	ppm	<1	<1	4	2
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	1563	1625	1953	1736
Magnesium	ppm	530	576	562	523
Zinc	ppm	1020	1202	1222	1056
Phosphorus	ppm	840	1038	1061	942
Barium	ppm	0	0	0	0
Boron	ppm	66	64	26	50

Depot: VOLVO0080
Unique No: 10752988
Signed: Wes Davis
Report Date: 22 Nov 2023



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GRAPHS

