



CONSTRUCTION EQUIPMENT

620705 VOLVO L90H 623306 - DIESEL ENGINE



Sample No: VCP431427
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 620705



SAMPLE INFORMATION

Sample Number	VCP431427	VCP402576	VCP396165	VCP360842
Sample Date	28 Nov 2023	08 Mar 2023	04 Nov 2022	08 Apr 2022
Machine Hours	10758	9482	8406	7921
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

KAMPS PALLET
 2900 PEACH RIDGE NW
 GRAND RAPIDS, MI
 US 49534
 Contact: SERVICE MANAGER

OIL CONDITION

Visc @ 100°C	cSt	15.1	15.0	14.9	14.1
Base Number (BN)	mg KOH/g	8.2	8.8	9.3	9.8
Oxidation (PA)	%	97	75	90	76

T: (616)453-9676
 F:

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

Water	%	NEG	NEG	NEG	NEG
Soot %	%	1.1	0.5	0.8	0.5
Nitration (PA)	%	113	88	109	87
Sulfation (PA)	%	68	57	68	59
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	4	4	4
Sodium	ppm	0	<1	0	2
Potassium	ppm	2	<1	2	1

WEAR METALS

Iron	ppm	29	17	24	18
Copper	ppm	2	2	3	2
Lead	ppm	0	<1	2	2
Tin	ppm	0	<1	1	1
Aluminum	ppm	3	2	2	3
Chromium	ppm	1	1	<1	1
Molybdenum	ppm	71	65	71	59
Nickel	ppm	0	0	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	<1	0	0
Manganese	ppm	0	1	<1	<1
Vanadium	ppm	0	<1	0	<1

ADDITIVES

Calcium	ppm	1296	1154	1243	1233
Magnesium	ppm	991	1068	1045	1010
Zinc	ppm	1351	1399	1412	1312
Phosphorus	ppm	1088	1073	1109	1119
Barium	ppm	3	0	0	0
Boron	ppm	4	0	<1	6

Depot: KAMGRAMI
Unique No: 10778847
Signed: Don Baldrige
Report Date: 11 Dec 2023



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VOLVO GRAPHS

