



CONSTRUCTION EQUIPMENT

SW1020029 VOLVO L90F 68176 - DIESEL ENGINE



Sample No: VCP411479
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW1020029



SAMPLE INFORMATION

Sample Number	VCP411479	VCP390389	VCP189461	VCP149210
Sample Date	09 Jun 2023	14 Apr 2023	21 Jul 2017	13 Sep 2016
Machine Hours	15077	14827	9510	8515
Oil Hours	0	0	0	500
Oil Changed	Changed	Not Chngd	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

PAVESTONE COMPANY-PHOENIX
 1835 EAST UNIVERSITY DRIVE
 PHOENIX, AZ
 US 85034
 Contact: FERNANDO PEREN
 fernando.peren@pavestone.com
 T: (623)297-7195
 F:

OIL CONDITION

Visc @ 100°C	cSt	13.3	13.0	13.74	15.00
Base Number (BN)	mg KOH/g	8.7	8.5	---	---
Oxidation (PA)	%	95	84	68	24

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.6	0.5	0.1	0
Nitration (PA)	%	74	63	58	33
Sulfation (PA)	%	65	59	53	33
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	6	3	7
Sodium	ppm	2	2	4	6
Potassium	ppm	0	0	<1	0

WEAR METALS

Iron	ppm	11	9	5	9
Copper	ppm	<1	2	<1	1
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	3	2	1	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	42	41	42	42
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	0
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1827	1613	1358	1218
Magnesium	ppm	548	513	650	797
Zinc	ppm	1257	1123	884	996
Phosphorus	ppm	1014	960	755	786
Barium	ppm	0	0	0	0
Boron	ppm	37	40	37	29

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: PAVPHO
Unique No: 10521582
Signed: Sean Felton
Report Date: 20 Jun 2023



CONSTRUCTION EQUIPMENT



GRAPHS

