



CONSTRUCTION EQUIPMENT

HORST VOLVO EC460CL 110503 - DIESEL ENGINE



Sample No: VCP348815
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: HORST



SAMPLE INFORMATION

Sample Number	VCP348815	VCP363269	VCP304544	VCP186439
Sample Date	27 Jan 2023	09 Sep 2022	25 May 2021	06 Apr 2016
Machine Hours	9014	8548	7721	4441
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

HIGHWAY EQUIPMENT AND SUPPLY CO
 200 BURKHOLDER DR.
 EPHRATA, PA
 US 17522
 Contact: CHAD HERRON
 chad@hwyequip.com
 T: (717)859-3132
 F: (717)859-2698

OIL CONDITION

Visc @ 100°C	cSt	12.5	12.8	12.6	12.8
Base Number (BN)	mg KOH/g	9.8	9.8	---	---
Oxidation (PA)	%	76	81	69	56

CONTAMINATION

Soot %	%	0.8	1.8	0.3	0.2
Nitration (PA)	%	76	103	63	58
Sulfation (PA)	%	62	71	60	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	4	2	5
Sodium	ppm	1	<1	3	5
Potassium	ppm	2	1	<1	6

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	22	45	9	12
Copper	ppm	1	2	1	3
Lead	ppm	1	7	<1	0
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	<1	3	2	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	55	79	63	38
Nickel	ppm	0	0	<1	<1
Titanium	ppm	<1	<1	<1	14
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1473	1133	1228	1426
Magnesium	ppm	642	822	855	685
Zinc	ppm	1132	1162	1150	1020
Phosphorus	ppm	941	965	1002	905
Barium	ppm	0	2	0	0
Boron	ppm	29	16	22	37

Depot: INSEPH
Unique No: 10320591
Signed: Wes Davis
Report Date: 02 Feb 2023



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GRAPHS

