



CONSTRUCTION EQUIPMENT

20927 VOLVO L110H 10018 - DIESEL ENGINE



Sample No: VCE250091
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 20927



SAMPLE INFORMATION

Sample Number	VCE250091	VCP424934	VCP370298	VCP375026
Sample Date	26 Oct 2023	08 May 2023	02 Feb 2023	07 Oct 2022
Machine Hours	20222	18857	18470	18126
Oil Hours	0	500	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

520 - ASCENDUM MACHINERY INC - KNOXVILLE
 5730 RUTLEDGE PIKE
 KNOXVILLE, TN
 US 37924
 Contact: BRANDON GRANT
 brandon.grant@ascendummachinery.com
 T: (865)525-1845
 F: (865)525-0251



OIL CONDITION

Visc @ 100°C	cSt	13.2	13.4	13.6	13.1
Base Number (BN)	mg KOH/g	9.0	9.6	10.5	9.4
Oxidation (PA)	%	82	85	78	90



CONTAMINATION

Soot %	%	0.3	0.3	0.3	0.5
Nitration (PA)	%	73	74	68	99
Sulfation (PA)	%	60	62	61	67
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	5	5	11
Sodium	ppm	3	2	2	<1
Potassium	ppm	1	3	2	1



WEAR METALS

Iron	ppm	12	12	10	20
Copper	ppm	2	1	<1	2
Lead	ppm	0	2	<1	4
Tin	ppm	<1	1	<1	<1
Aluminum	ppm	4	6	2	6
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	46	50	39	38
Nickel	ppm	<1	1	0	0
Titanium	ppm	4	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	<1



ADDITIVES

Calcium	ppm	1818	1893	1716	1813
Magnesium	ppm	520	506	542	670
Zinc	ppm	1303	1302	1162	1227
Phosphorus	ppm	1044	1049	967	996
Barium	ppm	0	0	0	0
Boron	ppm	30	39	50	26

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: VOLV00124
Unique No: 10722513
Signed: Wes Davis
Report Date: 31 Oct 2023



CONSTRUCTION EQUIPMENT



GRAPHS

