



CONSTRUCTION EQUIPMENT

ASCENDUM MACHINERY 500HR CSA/TRIANGLE GRADING 19006

VOLVO EC220E 1677 (S/N 610551) - DIESEL E



Sample No: VCP407580
Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40
Job No: 19006



SAMPLE INFORMATION

Sample Number	VCP407580	VCP382654	VCP387584	VCP0000490
Sample Date	03 Jul 2023	20 Feb 2023	06 Sep 2022	08 Feb 2022
Machine Hours	6473	6088	5535	4978
Oil Hours	390	0	0	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL

TRIANGLE GRADING AND PAVING INC

1521 Huffman Mill Rd
 BURLINGTON, NC
 US 27216

Contact: ROBERT KELLAM
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OIL CONDITION

Visc @ 100°C	cSt	14.6	14.3	14.5	13.4
Base Number (BN)	mg KOH/g	9.1	2.9	9.3	11.2
Oxidation (PA)	%	73	315	102	91



CONTAMINATION

Soot %	%	0.2	0.1	0.3	0.1
Nitration (PA)	%	82	35	105	73
Sulfation (PA)	%	57	217	68	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	9	7	8
Sodium	ppm	0	3	2	0
Potassium	ppm	2	0	2	0



WEAR METALS

Iron	ppm	13	24	17	13
Copper	ppm	<1	1	1	<1
Lead	ppm	<1	1	2	<1
Tin	ppm	<1	1	<1	<1
Aluminum	ppm	2	2	2	3
Chromium	ppm	<1	1	<1	<1
Molybdenum	ppm	62	56	43	43
Nickel	ppm	<1	<1	0	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	1232	1711	1657	1961
Magnesium	ppm	902	726	558	573
Zinc	ppm	1291	1333	1166	1060
Phosphorus	ppm	1072	1062	917	1010
Barium	ppm	0	<1	0	0
Boron	ppm	2	20	29	45

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: TRIBUR
Unique No: 10552489
Signed: Wes Davis
Report Date: 13 Jul 2023

Submitted By: CHRISTOPHER CANIPE



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GRAPHS

