



CONSTRUCTION EQUIPMENT

ASCENDUM MACHINERY/500 HOUR CSA VOLVO EC160E 1805 (S/N 310187) - DIESEL ENGINE



Sample No: VCP412406
Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP412406	VCP0005225	VCP05402629	VCP319157
Sample Date	21 Jul 2023	18 Nov 2022	15 Nov 2021	27 Jun 2021
Machine Hours	4937	4469	3959	3484
Oil Hours	0	510	500	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	SEVERE	ABNORMAL	ABNORMAL

TRIANGLE GRADING AND PAVING INC
 1521 Huffman Mill Rd
 BURLINGTON, NC
 US 27216
 Contact: ADAM CORBETT
 wacorbett@trianglegradingpaving.com
 T:
 F: (336)584-0145



OIL CONDITION

Visc @ 100°C	cSt	13.9	13.3	12.9	13.0
Base Number (BN)	mg KOH/g	9.4	12.9	---	---
Oxidation (PA)	%	63	91	84	84



CONTAMINATION

Soot %	%	0.3	0.5	0.2	0.2
Nitration (PA)	%	68	89	75	73
Sulfation (PA)	%	54	72	64	66
Glycol	%	NEG	0.10	0.06	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	13	8	6
Sodium	ppm	122	502	246	182
Potassium	ppm	100	448	165	75

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels remain high. The BN result indicates that there is suitable alkalinity remaining in the oil.



WEAR METALS

Iron	ppm	64	77	28	21
Copper	ppm	2	2	2	2
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	6	10	3	0
Chromium	ppm	2	2	<1	<1
Molybdenum	ppm	64	45	42	40
Nickel	ppm	<1	0	0	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1254	1801	1719	1643
Magnesium	ppm	936	527	536	485
Zinc	ppm	1260	1112	1093	1032
Phosphorus	ppm	1014	960	937	905
Barium	ppm	0	0	0	0
Boron	ppm	13	21	26	41

Depot: TRIBUR
Unique No: 10573010
Signed: Jonathan Hester
Report Date: 27 Jul 2023



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VOLVO GRAPHS

