



CONSTRUCTION EQUIPMENT

3751HR VOLVO L220H 2578 - DIESEL ENGINE



Sample No: VCP408032
Oil Type: SUNOCO SUPER-C SAE 15W40
Job No: 3751HR



SAMPLE INFORMATION

Sample Number	VCP408032	VCP247952	VCP214677	VCP207703
Sample Date	14 Sep 2023	29 May 2019	15 Dec 2017	11 Aug 2017
Machine Hours	16109	5574	1876	611
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

PENNSYLVANIA SUPPLY
 833 PAXTON STREET
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OIL CONDITION

Visc @ 100°C	cSt	12.7	12.3	12.55	11.22
Base Number (BN)	mg KOH/g	8.2	---	---	---
Oxidation (PA)	%	50	53	64	64

CONTAMINATION

Soot %	%	0.1	0.2	0	0.1
Nitration (PA)	%	55	59	50	58
Sulfation (PA)	%	47	50	50	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	3	5	23
Sodium	ppm	5	2	9	5
Potassium	ppm	0	8	<1	2

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 acceptable for the time in service.

WEAR METALS

Iron	ppm	4	6	8	17
Copper	ppm	<1	<1	10	512
Lead	ppm	<1	0	<1	<1
Tin	ppm	<1	1	0	0
Aluminum	ppm	5	<1	1	2
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	49	56	44	44
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	3	1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	2
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	1285	1280	1608	1267
Magnesium	ppm	790	817	461	824
Zinc	ppm	1164	1125	826	1020
Phosphorus	ppm	930	994	710	855
Barium	ppm	0	0	0	0
Boron	ppm	7	21	32	35

Depot: PENHAR
Unique No: 10683027
Signed: Don Baldrige
Report Date: 10 Oct 2023



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GRAPHS

