



CONSTRUCTION EQUIPMENT

SW-32971-2 CMC ROCK VOLVO L220H 3376 - DIESEL ENGINE



Sample No: VCP446569
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-32971-2 CMC ROCK



SAMPLE INFORMATION

Sample Number	VCP446569	VCP436518	VCP434554	VCP404710
Sample Date	22 Apr 2024	24 Jan 2024	25 Sep 2023	17 Jul 2023
Machine Hours	4089	3557	3016	2160
Oil Hours	500	540	1000	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	ATTENTION

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OIL CONDITION

Visc @ 100°C	cSt	12.4	13.0	12.9	12.4
Base Number (BN)	mg KOH/g	6.3	7.4	7.9	7.9
Oxidation (PA)	%	46	58	64	62

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.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.2	0.3	0.3
Nitration (PA)	%	59	65	65	58
Sulfation (PA)	%	48	52	56	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	5	6	0
Sodium	ppm	1	3	4	<1
Potassium	ppm	<1	3	0	1



WEAR METALS

Iron	ppm	4	4	15	12
Copper	ppm	4	6	9	31
Lead	ppm	0	1	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	1	3	27	<1
Chromium	ppm	0	0	<1	0
Molybdenum	ppm	38	62	60	59
Nickel	ppm	0	<1	<1	0
Titanium	ppm	<1	<1	3	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	<1	0



ADDITIVES

Calcium	ppm	1749	1294	1119	1145
Magnesium	ppm	495	671	973	843
Zinc	ppm	1168	1244	1262	1166
Phosphorus	ppm	964	1049	1006	953
Barium	ppm	0	0	0	2
Boron	ppm	15	19	2	3

Depot: VOLVO8770
Unique No: 11003250
Signed: Wes Davis
Report Date: 29 Apr 2024



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GRAPHS

