



CONSTRUCTION EQUIPMENT

SWO-068173 APAC/MIDS VOLVO L150H 6814 - DIESEL ENGINE



Sample No: VCP447571
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SWO-068173 APAC/MIDS



SAMPLE INFORMATION

Sample Number	VCP447571	VCP357130	VCP354794	VCP303046
Sample Date	10 Dec 2023	09 Sep 2022	12 Jun 2022	08 Mar 2021
Machine Hours	7105	5266	5188	2676
Oil Hours	0	0	0	0
Oil Changed	Changed	N/A	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.1	12.8	12.9	13.2
Base Number (BN)	mg KOH/g	6.2	11.1	7.7	---
Oxidation (PA)	%	53	79	57	51

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.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	69	58	53	69
Sulfation (PA)	%	52	63	57	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	3	4	4
Sodium	ppm	0	3	2	3
Potassium	ppm	2	5	1	7



WEAR METALS

Iron	ppm	4	3	5	5
Copper	ppm	<1	<1	1	26
Lead	ppm	<1	<1	<1	0
Tin	ppm	<1	1	<1	0
Aluminum	ppm	2	0	2	1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	88	44	89	2
Nickel	ppm	<1	<1	1	<1
Titanium	ppm	<1	0	0	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	<1	0



ADDITIVES

Calcium	ppm	1959	1477	1357	1323
Magnesium	ppm	91	436	399	725
Zinc	ppm	1165	1040	1186	789
Phosphorus	ppm	945	817	967	723
Barium	ppm	11	0	0	0
Boron	ppm	129	108	394	64

Depot: COWOXF
Unique No: 10782832
Signed: Don Baldrige
Report Date: 15 Dec 2023



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GRAPHS

