

CONSTRUCTION EQUIPMENT VOLVO L90G 3218 - DIESEL ENGINE



Sample No: VCP412446

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

Job No:

SAMPLE INFORMATION								
Sample Number	VCP412446	VCP343358	VCP250306	VCE142536				
Sample Date	24 Aug 2023	28 Oct 2021	15 Apr 2021	25 Nov 2020				
Machine Hours	15598	13198	12781	12429				
Oil Hours	2000	500	500	0				
Oil Changed	Changed	Changed	Changed	N/A				
Sample Status	ABNORMAL	ABNORMAL	SEVERE	NORMAL				



IAA - INSURANCE AUTO AUCTIONS - TIDEWATER
211 PRODUCTION DR
YORKTOWN, VA
US 23693
Contact: Service Manager

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OIL CONDITION								
Visc @ 100°C	cSt	14.7	△ 10.6	■13.3	13.2			
Base Number (BN)	mg KOH/g	6.8						
Oxidation (PA)	%	98	89	82	74			

VOLVO					
	MINATION				
LUNIA	VIINA I IUN				
Soot %	%	3.2	0.7	■ 0.5	■ 0.2
Nitration (PA)	%	130	87	76	50
Sulfation (PA)	%	79	65	64	61
Glycol	%	NEG	NEG	NEG	□0.0
Fuel	%	■0.8	▲ 8.6	<1.0	< 1.0
Silicon	ppm	14	A 28	● 81	5
Sodium	ppm	7	■8	27	6
Potassium	ppm	= 0	1 1	□4	1

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. All other component wear rates are normal. Fuel content negligible. There is an abnormal amount of solids and carbon present 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	■85	□66	<u> </u>	■9
Copper	ppm	4	1 2	△ 33	
Lead	ppm	■<1	4	■3	 <1
Tin	ppm	■1	 <1	<u> </u>	
Aluminum	ppm	<u> </u>	<u> </u>	<u></u> 54	4
Chromium	ppm	■ 2	4	<u> </u>	- <1
Molybdenum	ppm	42	■39	■32	■33
Nickel	ppm	■<1	 <1	□ 3	- <1
Titanium	ppm	0	<1	2	<1
Silver	ppm	■0	0	0	<1
Manganese	ppm	1	1	2	< 1
Vanadium	ppm	0	0	0	0

ADDITIVES						
Calcium	ppm	1490	■1830	1770	■1557	
Magnesium	ppm	593	548	617	519	
Zinc	ppm	1102	1 031	■993	□ 958	
Phosphorus	ppm	■895	■887	■842	■859	
Barium	ppm	0	□0	□0	0	
Boron	ppm	■10	■28	■38	6 4	

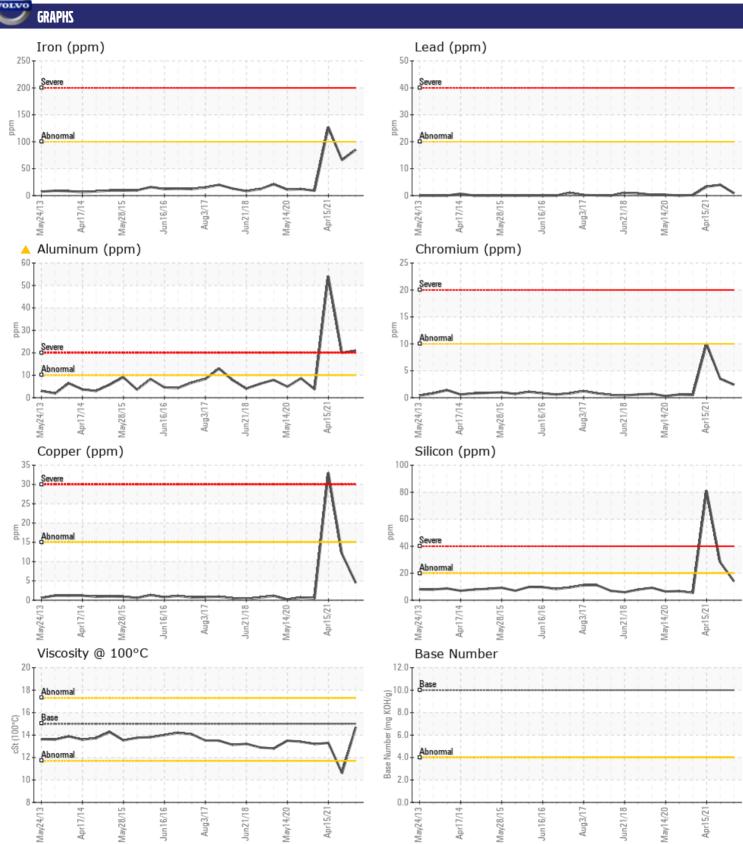
Depot:IAATIDUnique No:10714125Signed:Don BaldridgeReport Date:31 Oct 2023



CONSTRUCTION EQUIPMENT







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Contact/Location: Service Manager - IAATID