



CONSTRUCTION EQUIPMENT

TMR-OKEECHOBEE 434166 VOLVO L180H 4821 - DIESEL ENGINE



Sample No: VCP454517
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP454517	VCP445664	VCP432915	VCP412620
Sample Date	18 May 2024	12 Feb 2024	23 Jan 2024	21 Jul 2023
Machine Hours	16357	15531	15313	13817
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ATTENTION	NORMAL

TRADEMARK METALS RECYCLING - OKEECHOBEE
 9800 NE 128TH AVE
 OKEECHOBEE, FL
 US 34972
 Contact: RYAN BOWDEN



OIL CONDITION

Visc @ 100°C	cSt	12.9	12.9	11.8	12.3
Base Number (BN)	mg KOH/g	8.9	9.7	6.6	9.7
Oxidation (PA)	%	82	74	92	81

T: (863)467-9810
 F: (863)467-9814

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	0.1	0.4	0.1
Nitration (PA)	%	64	48	80	55
Sulfation (PA)	%	60	58	63	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	2.6	<1.0
Silicon	ppm	5	3	6	3
Sodium	ppm	2	2	3	3
Potassium	ppm	2	2	2	0



WEAR METALS

Iron	ppm	6	3	10	3
Copper	ppm	2	<1	2	3
Lead	ppm	1	0	3	<1
Tin	ppm	1	0	<1	0
Aluminum	ppm	2	1	3	<1
Chromium	ppm	<1	0	<1	0
Molybdenum	ppm	42	42	39	42
Nickel	ppm	<1	0	<1	0
Titanium	ppm	<1	<1	0	0
Silver	ppm	1	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	<1	0	0	<1



ADDITIVES

Calcium	ppm	1612	1313	1578	1710
Magnesium	ppm	551	568	481	495
Zinc	ppm	1158	1039	1110	1108
Phosphorus	ppm	943	829	937	907
Barium	ppm	<1	11	0	0
Boron	ppm	24	30	14	38

Depot: TRAOKE
Unique No: 11048576
Signed: Wes Davis
Report Date: 29 May 2024



CONSTRUCTION EQUIPMENT



GRAPHS

