



CONSTRUCTION EQUIPMENT

VOLVO L90H 624903 - DIESEL ENGINE



Sample No: VCP419619
Oil Type: SHELL ROTELLA T3 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP419619	VCP408057	VCP408067	VCP382242
Sample Date	13 Jul 2023	06 Jun 2023	01 May 2023	21 Mar 2023
Machine Hours	8814	8495	8218	7935
Oil Hours	319	277	283	328
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

COVANTA ENERGY
 141 CRANBERRY HWY
 WEST WAREHAM, MA
 US 02576
 Contact: SAWYER
 ssawyer@woodcomachinery.com
 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	13.1	13.3	12.9	13.0
Base Number (BN)	mg KOH/g	8.2	8.5	8.8	8.5
Oxidation (PA)	%	52	56	59	56



CONTAMINATION

Soot %	%	0.3	0.2	0.2	0.2
Nitration (PA)	%	63	53	53	55
Sulfation (PA)	%	50	52	53	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	7	7	8
Sodium	ppm	3	1	2	1
Potassium	ppm	0	<1	1	0



WEAR METALS

Iron	ppm	53	47	47	55
Copper	ppm	0	<1	<1	<1
Lead	ppm	0	0	0	0
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	1	<1	<1	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	54	58	62	60
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	0	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	1	<1	<1	2
Vanadium	ppm	<1	0	0	<1



ADDITIVES

Calcium	ppm	2023	1790	1800	1670
Magnesium	ppm	336	348	407	394
Zinc	ppm	1198	1168	1237	1127
Phosphorus	ppm	1057	1016	1033	956
Barium	ppm	0	0	0	0
Boron	ppm	73	80	88	88

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.

Depot: COVWES
Unique No: 10563444
Signed: Wes Davis
Report Date: 20 Jul 2023



CONSTRUCTION EQUIPMENT



GRAPHS

