



CONSTRUCTION EQUIPMENT

W07013191-3 VOLVO A40F 11087 - DIESEL ENGINE



Sample No: VCP407654
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: W07013191-3



SAMPLE INFORMATION

Sample Number	VCP407654	VCP109246	VCE166045	VCP136690
Sample Date	02 Oct 2023	28 Aug 2013	06 May 2013	17 Jan 2013
Machine Hours	16211	4470	4065	3483
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	NORMAL	NORMAL	NORMAL

KYANITE MINING CORPORATION
 PO BOX 486
 DILLWYN, VA
 US 23936
 Contact: SERVICE MANAGER



OIL CONDITION

Visc @ 100°C	cSt	12.6	13.56	13.44	13.00
Base Number (BN)	mg KOH/g	7.7	---	---	---
Oxidation (PA)	%	56	56	52	48

T: (804)983-2085
 F:

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. The condition of the oil is acceptable for the time in service.



CONTAMINATION

Soot %	%	0.3	0.3	0.3	0.2
Nitration (PA)	%	58	67	58	58
Sulfation (PA)	%	57	50	44	47
Glycol	%	0.0	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	4	4	3
Sodium	ppm	▲ 220	5	7	5
Potassium	ppm	2	7	1	0



WEAR METALS

Iron	ppm	15	10	10	7
Copper	ppm	<1	3	9	6
Lead	ppm	0	4	3	3
Tin	ppm	0	0	1	1
Aluminum	ppm	4	2	2	1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	117	40	43	46
Nickel	ppm	1	4	4	2
Titanium	ppm	0	4	1	3
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	0
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1400	1336	1305	1308
Magnesium	ppm	405	760	644	810
Zinc	ppm	1237	1028	895	1049
Phosphorus	ppm	1012	937	829	884
Barium	ppm	0	0	0	0
Boron	ppm	362	12	17	17

Depot: KYADIL
Unique No: 10682641
Signed: Doug Bogart
Report Date: 12 Oct 2023



CONSTRUCTION EQUIPMENT



GRAPHS

