



CONSTRUCTION EQUIPMENT

SW1021713 AZ GRAINS VOLVO L110H 632044 - DIESEL ENGINE



Sample No: VCP412320
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1021713 AZ GRAINS



SAMPLE INFORMATION

Sample Number	VCP412320	VCP381517	VCP379851	VCP387775
Sample Date	19 Jul 2023	11 Apr 2023	10 Jan 2023	12 Oct 2022
Machine Hours	4507	4137	3584	3047
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ARNOLD MACHINERY COMPANY
 4323 EAST WINSLOW AVENUE
 PHOENIX, AZ
 US 85040
 Contact: RANDY PRZEKURAT
 randyp@arnoldmachinery.com
 T:
 F: (602)414-1904



OIL CONDITION

Visc @ 100°C	cSt	14.5	14.8	15.0	14.1
Base Number (BN)	mg KOH/g	8.7	9.1	8.7	10.1
Oxidation (PA)	%	78	79	73	81



CONTAMINATION

Soot %	%	0.8	0.8	0.6	0.8
Nitration (PA)	%	86	84	82	83
Sulfation (PA)	%	62	55	58	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	6	4	6
Sodium	ppm	1	8	2	<1
Potassium	ppm	<1	18	3	0



WEAR METALS

Iron	ppm	22	22	20	24
Copper	ppm	3	4	2	7
Lead	ppm	4	3	2	3
Tin	ppm	<1	1	<1	1
Aluminum	ppm	5	<1	2	3
Chromium	ppm	1	1	1	1
Molybdenum	ppm	54	57	54	57
Nickel	ppm	0	0	<1	0
Titanium	ppm	0	<1	0	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1492	1281	1341	1362
Magnesium	ppm	988	953	806	885
Zinc	ppm	1433	1361	1277	1288
Phosphorus	ppm	1122	1070	1035	1041
Barium	ppm	0	0	0	0
Boron	ppm	30	30	16	10

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: VOLVO6174
Unique No: 10574767
Signed: Wes Davis
Report Date: 27 Jul 2023



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VOLVO GRAPHS

