



CONSTRUCTION EQUIPMENT

VOLVO A45G 352092 - DIESEL ENGINE



Sample No: VCP406269
Oil Type: MOBIL 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP406269	VCP405314	VCP360533	VCP360529
Sample Date	23 Oct 2023	07 Feb 2023	07 Jul 2022	04 Apr 2022
Machine Hours	6512	5732	4754	4292
Oil Hours	0	500	0	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL

ARNOLD MACHINERY COMPANY
 3330 NORTH YELLOWSTONE HIGHWAY
 IDAHO FALLS, ID
 US 83401
 Contact: JASON MERRILL
 jmerrill@arnoldmachinery.com
 T: (208)523-0822
 F: (208)523-9918



OIL CONDITION

Visc @ 100°C	cSt	12.8	13.5	13.0	13.1
Base Number (BN)	mg KOH/g	9.7	8.6	9.5	9.3
Oxidation (PA)	%	56	71	73	67



CONTAMINATION

Soot %	%	0.2	1	0.4	0.4
Nitration (PA)	%	48	93	83	88
Sulfation (PA)	%	52	65	62	62
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	5	4
Sodium	ppm	6	2	3	2
Potassium	ppm	2	0	2	1



WEAR METALS

Iron	ppm	9	26	11	12
Copper	ppm	3	2	2	5
Lead	ppm	0	1	<1	<1
Tin	ppm	0	1	<1	<1
Aluminum	ppm	2	5	2	1
Chromium	ppm	<1	1	<1	<1
Molybdenum	ppm	63	68	56	47
Nickel	ppm	<1	▲ 4	<1	<1
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1080	1360	1379	1354
Magnesium	ppm	892	883	816	976
Zinc	ppm	1192	1315	1238	1359
Phosphorus	ppm	981	1029	1012	1091
Barium	ppm	0	0	0	0
Boron	ppm	9	49	21	26

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: VOLVO0077
Unique No: 10724887
Signed: Wes Davis
Report Date: 02 Nov 2023



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

