



CONSTRUCTION EQUIPMENT

2002 BOBCAT AT6340014 - DIESEL ENGINE



Sample No: VCP408572
Oil Type: SHELL ROTELLA T 15W40
Job No: 2002



SAMPLE INFORMATION

Sample Number	VCP408572	---	---	---
Sample Date	18 Oct 2023	---	---	---
Machine Hours	462	---	---	---
Oil Hours	212	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---

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OIL CONDITION

Visc @ 100°C	cSt	█ 12.6	---	---	---
Base Number (BN)	mg KOH/g	█ 7.7	---	---	---
Oxidation (PA)	%	61	---	---	---

Diagnosis

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The aluminum level is abnormal. All other 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

Soot %	%	█ 0.1	---	---	---
Nitration (PA)	%	56	---	---	---
Sulfation (PA)	%	52	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 13	---	---	---
Sodium	ppm	█ 0	---	---	---
Potassium	ppm	█ 7	---	---	---



WEAR METALS

Iron	ppm	█ 75	---	---	---
Copper	ppm	█ 2	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ 7	---	---	---
Aluminum	ppm	▲ 69	---	---	---
Chromium	ppm	█ 1	---	---	---
Molybdenum	ppm	█ 36	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	█ 1753	---	---	---
Magnesium	ppm	█ 235	---	---	---
Zinc	ppm	█ 1047	---	---	---
Phosphorus	ppm	█ 814	---	---	---
Barium	ppm	█ 10	---	---	---
Boron	ppm	█ 95	---	---	---

Depot: TOTGAI
Unique No: 10711183
Signed: Jonathan Hester
Report Date: 26 Oct 2023



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GRAPHS

