



CONSTRUCTION EQUIPMENT

SWO-071782 VULCAN VOLVO EC380EL 310021 - REAR LEFT FINAL DRIVE



Sample No: VCP453682
Oil Type: GEAR OIL SAE 90W140
Job No: SWO-071782 VULCAN



SAMPLE INFORMATION

Sample Number	VCP453682	VCP428706	VCP428919	VCP407503
Sample Date	06 May 2024	21 Dec 2023	07 Sep 2023	18 May 2023
Machine Hours	11224	10648	10247	9662
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	SEVERE	SEVERE	SEVERE	SEVERE

WHITAKER CONTRACTING

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OIL CONDITION

Visc @ 40°C	cSt	308	314	559	410
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CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	▲ 925	▲ 412	▲ 2230	▲ 1704
Sodium	ppm	■ 16	■ 0	■ 43	■ 29
Potassium	ppm	■ 66	■ 33	■ 183	■ 151



WEAR METALS

Iron	ppm	▲ 2582	▲ 1556	▲ 4725	▲ 3294
Copper	ppm	■ 4	■ 0	■ 10	■ 8
Lead	ppm	■ <1	■ 0	■ 2	■ <1
Tin	ppm	■ 0	■ 0	■ 1	■ 0
Aluminum	ppm	● 205	● 98	● 529	● 474
Chromium	ppm	▲ 20	■ 4	▲ 46	▲ 33
Molybdenum	ppm	■ 11	■ 3	8	6
Nickel	ppm	■ 5	■ 0	■ 8	■ 7
Titanium	ppm	▲ 16	2	■ 35	■ 27
Silver	ppm	0	0	0	0
Manganese	ppm	■ 17	■ 3	30	22
Vanadium	ppm	<1	0	1	<1



ADDITIVES

Calcium	ppm	■ 247	■ 184	948	834
Magnesium	ppm	77	44	212	173
Zinc	ppm	■ 102	■ 56	64	64
Phosphorus	ppm	■ 1000	786	940	892
Barium	ppm	■ 2	■ 5	0	5
Boron	ppm	■ 109	■ 65	152	135

Diagnosis

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

Depot: WHIGUN
Unique No: 11020299
Signed: Angela Borella
Report Date: 13 May 2024



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

