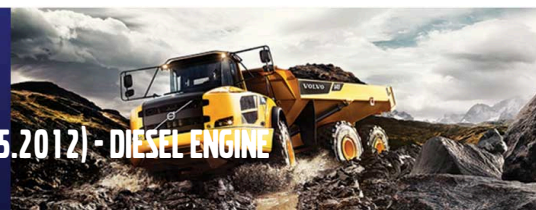




CONSTRUCTION EQUIPMENT

SPM716528 SENNEBOGEN 835ME 835.0.2012 (S/N 835.2012) - DIESEL ENGINE



Sample No: VCP452569
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SPM716528



SAMPLE INFORMATION

Sample Number	VCP452569	VCP404386	VCP320069	VCP309476
Sample Date	23 May 2024	20 Jan 2023	06 Aug 2021	24 Mar 2021
Machine Hours	19052	17488	15745	15238
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	SEVERE	SEVERE	NORMAL	SEVERE

SIMS METAL MANAGEMENT

2500 S. PAULINA
CHICAGO, IL
US 60608
Contact: RYAN WISE
ryan.wise@simsmm.com
T:
F:

OIL CONDITION

Visc @ 100°C	cSt	▲ 8.7	▲ 10.0	■ 12.8	▲ 11.2
Base Number (BN)	mg KOH/g	■ 6.3	■ 7.7	---	---
Oxidation (PA)	%	148	90	77	96

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 1.4	■ 0.8	■ 0.6	■ 0.8
Nitration (PA)	%	159	117	89	122
Sulfation (PA)	%	82	62	60	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	▲ 31.0	▲ 15.7	■ 1.6	▲ 10.6
Silicon	ppm	■ 9	■ 4	■ 4	■ 3
Sodium	ppm	■ 7	■ 2	■ 2	■ 4
Potassium	ppm	■ 3	■ <1	■ <1	■ 1

Diagnosis

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

WEAR METALS

Iron	ppm	■ 104	■ 41	■ 20	■ 35
Copper	ppm	■ 3	■ 1	■ 2	■ 3
Lead	ppm	■ 0	■ 1	■ 0	■ <1
Tin	ppm	■ <1	■ <1	■ <1	■ <1
Aluminum	ppm	■ 7	■ 4	■ 0	■ 4
Chromium	ppm	■ 3	■ 1	■ <1	■ 1
Molybdenum	ppm	■ 46	■ 56	■ 66	■ 58
Nickel	ppm	■ 1	■ <1	■ <1	■ 0
Titanium	ppm	■ 0	■ 0	■ <1	■ 2
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ 1	■ <1	■ <1	■ <1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	■ 915	■ 1093	■ 1309	■ 1144
Magnesium	ppm	■ 703	■ 927	■ 985	■ 885
Zinc	ppm	■ 989	■ 1226	■ 1281	■ 1148
Phosphorus	ppm	■ 816	■ 943	■ 1166	■ 993
Barium	ppm	■ <1	■ 0	■ 0	■ 0
Boron	ppm	■ 9	■ 0	■ 9	■ 13

Depot: SIMCHIL
Unique No: 11059518
Signed: Jonathan Hester
Report Date: 11 Jun 2024



CONSTRUCTION EQUIPMENT



GRAPHS

