



# CONSTRUCTION EQUIPMENT

SPM621955 SENNEBOGEN 835 835.0.2015 - DIESEL ENGINE



**Sample No:** VCP429129  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SPM621955



## SAMPLE INFORMATION

Sample Number	VCP429129	VCP365830	VCP373875	VCP356183
Sample Date	10 Nov 2023	26 Jan 2023	02 Aug 2022	05 May 2022
Machine Hours	24233	23836	23382	22818
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	SEVERE	SEVERE	ABNORMAL	SEVERE

### SIMS METAL MANAGEMENT

2500 S. PAULINA  
 CHICAGO, IL  
 US 60608  
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## OIL CONDITION

Visc @ 100°C	cSt	▲ 10.1	▲ 11.3	▲ 11.6	▲ 10.5
Base Number (BN)	mg KOH/g	■ 9.1	■ 8.7	■ 9.7	■ 9.4
Oxidation (PA)	%	65	57	119	84

### Diagnosis

We advise that you check the fuel injection system. The oil 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. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

## CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.1	■ 0.2	■ 1.1	■ 0.4
Nitration (PA)	%	85	81	148	109
Sulfation (PA)	%	55	51	80	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	● 9.2	● 8.4	▲ 6.1	● 13.9
Silicon	ppm	■ 3	■ 4	■ 9	■ 4
Sodium	ppm	■ 0	■ 2	■ 5	■ 1
Potassium	ppm	■ 4	■ 1	■ 4	■ 2

## WEAR METALS

Iron	ppm	■ 11	■ 15	■ 63	■ 17
Copper	ppm	■ <1	■ <1	■ 2	■ <1
Lead	ppm	■ 0	■ <1	■ 6	■ <1
Tin	ppm	■ 0	■ <1	■ 1	■ <1
Aluminum	ppm	■ 2	■ 2	■ 6	■ 2
Chromium	ppm	■ 0	■ <1	■ 4	■ 1
Molybdenum	ppm	■ 3	■ 13	■ 8	■ 20
Nickel	ppm	■ 0	■ <1	■ <1	■ 0
Titanium	ppm	■ <1	■ 0	■ <1	■ <1
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ 0	■ <1	■ <1	■ <1
Vanadium	ppm	0	0	0	0

## ADDITIVES

Calcium	ppm	■ 1258	■ 1745	■ 1692	■ 1283
Magnesium	ppm	■ 672	■ 334	■ 887	■ 808
Zinc	ppm	■ 767	■ 972	■ 1079	■ 1013
Phosphorus	ppm	■ 626	■ 767	■ 871	■ 782
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 72	■ 23	■ 57	■ 49

**Depot:** SIMCHIL  
**Unique No:** 10766807  
**Signed:** Wes Davis  
**Report Date:** 05 Dec 2023



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## GRAPHS

