

[SPM715564 ALTER ROCK] SENNEBOGEN 835ME 835.0.2938 Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		VCP446960	VCP350320	VCP433443
	Sample Date		Client Info		10 May 2024	27 Feb 2024	16 Nov 2023
	Machine Age	hrs	Client Info		5299	4783	4188
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ATTENTION	ABNORMAL	NORMAL
					_	4.0	
WEAR	Iron	ppm	ASTM D5185m		7	12	12
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	<1	0
	Nickel	ppm	ASTM D5185m	>4	0	0	0
	Titanium	ppm	ASTM D5185m	0	<1	<1	0
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m		2	2	3
	Lead	ppm	ASTM D5185m		1	1	0
	Copper	ppm	ASTM D5185m		<1	1	1
	Tin	ppm	ASTM D5185m	>15	<1	0	0
	Vanadium	ppm	ASTM D5185m	NONE	<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3	3	3
	Potassium	ppm	ASTM D5185m	>20	3	2	<1
There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>5	<1.0	3 .3	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.1	7.6
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	21.8	20.2
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	0			450			4
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	1	4
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		8	0	15
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m	100	61	54	60
	Manganese	ppm	ASTM D5185m	450	<1	0	<1
	Magnesium	ppm	ASTM D5185m		1043	970	835
	Calcium	ppm	ASTM D5185m		1228	1075	1279
	Phosphorus	ppm	ASTM D5185m		1152	1029	1005
	Zinc Sulfur	ppm	ASTM D5185m		1298	1176	1203
		ppm	ASTM D5185m		3446	2664	3018
	Oxidation	Abs/.1mm	*ASTM D7414	>20	16.5	18.9	16.2

Base Number (BN) mg KOH/g ASTM D2896 8.5

ASTM D445 14.4

Visc @ 100°C cSt

6.0

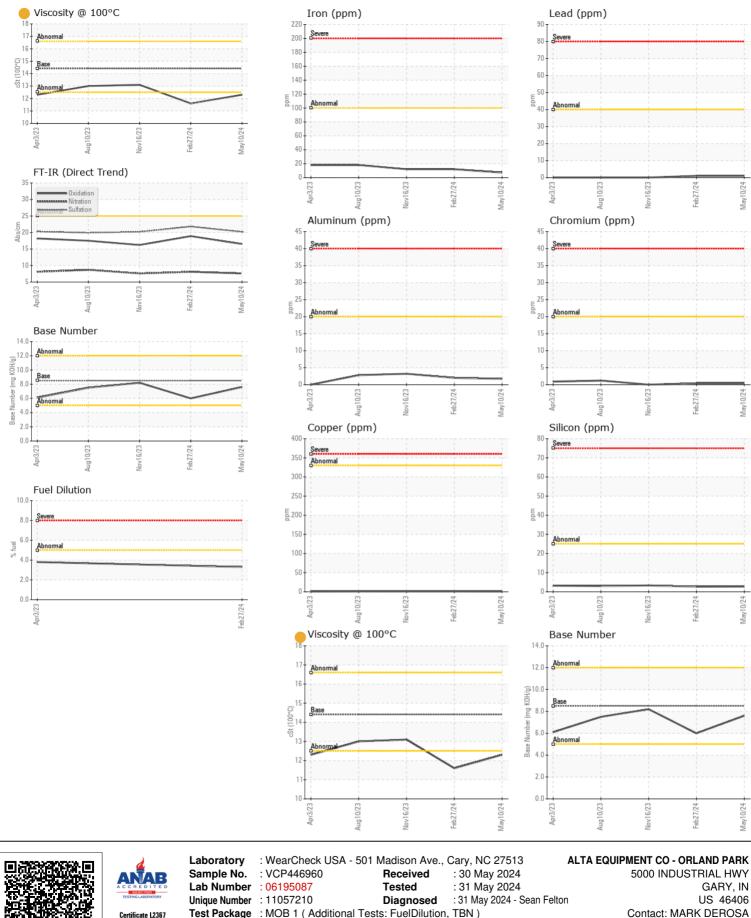
11.6

7.6

12.3

8.2

13.1



Test Package : MOB 1 (Additional Tests: FuelDilution, TBN) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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