

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

SENNEBOGEN 840E MH-82

Rear Right Planetary Fluid GEAR OIL SAE 80W90 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

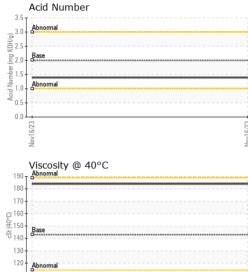
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

				Nov2023		
SAMPLE INFORM	ΛΑΤΙΟΝ	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0113889		
Sample Date		Client Info		16 Nov 2023		
Machine Age	hrs	Client Info		230		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	113		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	1		
Lead	ppm	ASTM D5185m	>25	0		
Copper	ppm	ASTM D5185m	>75	18		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	<1		
Barium	ppm	ASTM D5185m	200	362		
Molybdenum	ppm	ASTM D5185m	12	0		
Manganese	ppm	ASTM D5185m		2		
Magnesium	ppm	ASTM D5185m	12	<1		
Calcium	ppm	ASTM D5185m	150	8		
Phosphorus	ppm	ASTM D5185m	1650	1144		
Zinc	ppm	ASTM D5185m	125	15		
Sulfur	ppm	ASTM D5185m	22500	29229		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	9		
Sodium	ppm	ASTM D5185m	>170	5		
Potassium	ppm	ASTM D5185m	>20	<1		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	1.39		



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		method				history2	
White Metal	scalar	*Visual	NONE	LIGHT			
Yellow Metal	scalar	*Visual	NONE	NONE			
Precipitate	scalar	*Visual	NONE	NONE			
Silt	scalar	*Visual	NONE	NONE			
Debris	scalar	*Visual	NONE	NONE			
Sand/Dirt	scalar	*Visual	NONE	NONE			
Appearance	scalar	*Visual	NORML	NORML			
Odor	scalar	*Visual	NORML	NORML			
Emulsified Water	scalar	*Visual	>0.2	NEG			
Free Water	scalar	*Visual		NEG			
FLUID PROPE	RTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	143	184			
SAMPLE IMAG	ies	method	limit/base	current	history1	history2	
Color				no image	no image	no image	
Bottom				no image	no image	no image	
GRAPHS			L	Lead (ppm)			
00			150	Τ			
00			E ¹⁰⁰	- 0			
Abnormal			L 50	Abnormal			
3/23			3/23	5/23			
Nov16			Nov16	Nov16			
				Chromium (p	om)		
00					Severe		
50			E ²⁰	Abnormal			
Abnormal			¹¹ 10	- 0			
8/23			3/23	6/23			
Nov16			Nov16	Nov16			
00				I enum			
00 - Abnormal			트 ²⁰⁰				
0			¹⁰ 100	+ Abnormal			
/16/23			/16/23	/16/23			
Viscosity @ 40°C				Acid Number			
00 Abnormal			9 4.0	Abnormal			
50 - Base Abnormal			<u>لة</u> 2.0	Base Abnormal			
Abnormal			N	ļ.			
			Nov16/23	Nov16/23			
Nov16/23				-			
	Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPE Visc @ 40°C SAMPLE IMAC Color Bottom GRAPHS Iron (ppm) Sever Abnormal Copper (ppm)	Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar FLUID PROPETIES Visc @ 40°C cSt SAMPLE IMAGES Color Bottom GRAPHS Iron (ppm) GRAPHS Iron (ppm) Aluminum (ppm) Copper (ppm) Copper (ppm) Copper (ppm)	Sand/Dirt scalar *Visual Appearance scalar *Visual Odor scalar *Visual Emulsified Water scalar *Visual Free Water scalar *Visual Visc @ 40°C cSt ASTM D445 SAMPLE IMAGES method Color Color Bottom	Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual Imit/base Visc @ 40°C cSt ASTM D445 143 SAMPLE IMAGES method imit/base Color Iron (ppm) imit/base Iron (ppm) gamma gamma Anomal gamma gamma Anomal gamma gamma Gopper (ppm) gamma gamma For the scalar gamma For the scalar gamma	Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG Free Water scalar *Visual >0.2 NEG Free Water scalar *Visual >0.2 NEG FLUID PROPERTIES method limit/base current Visc @ 40°C cSt ASTM D445 143 184 SAMPLE IMAGES method imit/base current Color Iron image no image no image Bottom Iron (ppm)	Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Free Water scalar *Visual >0.2 NEG FLUID PROPERTIES method imit/base current history1 Visc @ 40°C cSt ASTM D445 143 184 SAMPLE IMAGES method imit/base current history1 Color Iron (ppm)	