

WEAR ABNORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



BELL B30E B93A631ET03010079

Rear Differential

GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

V	V	F	Δ	R
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The copper level is abnormal. All other component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

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The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		BE0009027		
Sample Date		Client Info		09 Apr 2024		
Machine Age	hrs	Client Info		1992		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status	atus		ABNORMAL			
PQ		ASTM D8184	>3000	88		
Iron	ppm	ASTM D5185m	>HR:1=	338		
Chromium	ppm	ASTM D5185m	>10	3		
Nickel	ppm	ASTM D5185m	>10	3		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	0.5	0		
Aluminum	ppm	ASTM D5185m	>25	6		
Lead	ppm	ASTM D5185m	>25	2		
Copper	ppm	ASTM D5185m	>100	1 26		
Tin	ppm	ASTM D5185m	>10	3		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>201	17		
Potassium	ppm	ASTM D5185m	>20	4		
Water		WC Method	>1.01	NEG		
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	>1.01	NEG		
Sodium	ppm	ASTM D5185m	>170	2		
Boron	ppm	ASTM D5185m	400	6		
Barium	ppm	ASTM D5185m	200	1		
Molybdenum	ppm	ASTM D5185m	12	3		
Manganese	ppm	ASTM D5185m	10	7		
Magnesium	ppm	ASTM D5185m	12	13		
Calcium	ppm	ASTM D5185m	150	56		
Phosphorus	ppm	ASTM D5185m	1650	493		
Zinc	ppm	ASTM D5185m	125	68		
Sulfur	ppm	ASTM D5185m	22500	17099		
Visc @ 40°C	cSt	ASTM D445	143	147		



