

## [SOUTH HOLLAND] LIEBHERR LTM 1300 AT1692 - DRIVE 1 (S/N 071692)

## **Front Differential**

## HPL DIFFERENTIAL LIFE 75W90 SYNTHETIC (20 LTR)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		HPL008773		
	Sample Date		Client Info		06 Aug 2020		
	Machine Age	mls	Client Info		22832		
	Oil Age	mls	Client Info		7545		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				ABNORMAL		
VEAR	Iron	ppm	ASTM D5185m	>500	47		
	Chromium	ppm	ASTM D5185m		0		
The copper level is abnormal. All other component wear rates are normal.	Nickel	ppm	ASTM D5185m	210	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>25	4		
	Lead	ppm	ASTM D5185m	>25	0		
	Copper	ppm	ASTM D5185m	>100	<b>A</b> 131		
	Tin	ppm	ASTM D5185m	>10	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon		ASTM D5185m	. 75	0		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		8 0		
	Water	ppm	WC Method		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	>.2	NEG		
FLUID CONDITION							
	Sodium	ppm	ASTM D5185m		0		
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		27		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		0		
	Manganese Magnesium	ppm	ASTM D5185m		<1		
	-	ppm	ASTM D5185m		0		
	Calcium Phosphorus	ppm	ASTM D5185m ASTM D5185m		0		
	Phosphorus	ppm	MOTIVI DOTOOM		349		
	•	nom	ACTM DE10E~		55		
	Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m		55 25056		

Acid Number (AN) mg KOH/g ASTM D8045

cSt

Visc @ 40°C

ASTM D445 Contact/Location: DAVE KOEHNE - STEBOL

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