WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL



Machine Id **LIEBHERR LH50 14799**

Splitter Box

Test	CHEVRON DELO GEAR ESI OI	L 80W90 (6	LTR)					
Resample at the next service interval to monitor. Sample Number Cilient Info 0	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date Client Info 06 May 2024		Sample Number		Client Info			-	
Oil Age hrs Cilent Info O		Sample Date		Client Info		08 May 2024		
Filter Age		Machine Age	hrs	Client Info		17000		
Oil Changed Cilent Info Changed Filter Changed Cilent Info Sample Status NA		Oil Age	hrs	Client Info		0		
Filter Changed Sample Status		Filter Age	hrs	Client Info		0		
Normal N		Oil Changed		Client Info		Changed		
Iron		Filter Changed		Client Info		N/A		
All component wear rates are normal. Chromium ppm ASTM D5185m >2 0 Nickel ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >5 2 Aluminum ppm ASTM D5185m >5 2 Copper ppm ASTM D5185m >0 Copper ppm ASTM D5185m >0 Tin ppm ASTM D5185m >0 Vanadium ppm ASTM D5185m >0 0 Valter Volume V		Sample Status				NORMAL		
All component wear rates are normal. Chromium ppm ASTM 05185m > 2 0 Nickel ppm ASTM 05185m > 2 0 Silver ppm ASTM 05185m > 2 0 Silver ppm ASTM 05185m > 5 2 Aluminum ppm ASTM 05185m > 5 2 Copper ppm ASTM 05185m > 10 Tin ppm ASTM 05185m > 2 0 Copper ppm ASTM 05185m > 2 0 Tin ppm ASTM 05185m > 2 0 Tin ppm ASTM 05185m > 2 0 Vanadium ppm ASTM 05185m > 2 0 Valued	WEAR	Iron	ppm	ASTM D5185(m)	>80	25		
Nickel ppm ASTM DS185/m >2 0 Titanium ppm ASTM DS185/m >2 0 Silver ppm ASTM DS185/m >5 2 Aluminum ppm ASTM DS185/m >5 2 Aluminum ppm ASTM DS185/m >5 2 Copper ppm ASTM DS185/m >2 0 Tin ppm ASTM DS185/m >2 0 Vanadium ppm ASTM DS185/m >0 Vallow Metal scalar Visual* NONE NONE Vallow Metal Scalar Visual* NONE NONE Vallow Metal Scalar Visual* NONE NONE Vallow Metal Scalar Visual* NONE NONE Vallow Metal Scalar Visual* NONE NONE		Chromium		. ,				
Titanium ppm ASTM D585m <1 Silver ppm ASTM D585m 5 2 Aluminum ppm ASTM D585m 5 2 Lead ppm ASTM D585m 5 2 Lead ppm ASTM D585m 5 2 Copper ppm ASTM D585m 5 2 Tin ppm ASTM D585m 5 0 Tin ppm ASTM D585m 5 0 Tin ppm ASTM D585m 5 0 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Water WC Method so.1 NEG Water WC Method so.1 NEG Sit scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Sand/Dirt scalar Visual* NORML Codor scalar Visual* NORML Emulsified Water scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML Emulsified Water scalar Visual* NORML Emulsified Water scalar Visual* So.1 NEG Sodium ppm ASTM D585m 0 0 Magnesium ppm ASTM D585m 0 5 Magnesium ppm ASTM D585m 0 5 Magnesium ppm ASTM D585m 0 12 Phosphorus ppm ASTM D585m 0 12 Sutur ppm ASTM D585m 0 126 Sutur ppm ASTM D5		Nickel				0		
Aluminum ppm ASTMOSISS m >5 2		Titanium		ASTM D5185(m)		<1		
Lead ppm ASTM DSI85 m > 2 0		Silver				0		
Copper		Aluminum	ppm	ASTM D5185(m)	>5	2		
Tin		Lead	ppm	ASTM D5185(m)	>2	0		
Vanadium ppm ASTM 05185(m) 0		Copper	ppm	ASTM D5185(m)	>10	<1		
White Metal Yellow Metal Scalar Visual* NONE		Tin	ppm	ASTM D5185(m)	>2	0		
Yellow Metal Scalar Visual* NONE N		Vanadium	ppm	ASTM D5185(m)		0		
Silicon ppm ASTM D5(85(m) >20 2		White Metal	scalar	Visual*	NONE	NONE		
Potassium		Yellow Metal	scalar	Visual*	NONE	NONE		
Potassium	CONTAMINATION	Silicon	maa	ASTM D5185(m)	>10	9		
Water WC Method >0.1 NEG Silt scalar Visual* NONE NONE Debris scalar Visual* NONE VLITE Sand/Dirt scalar Visual* NONE NONE NONE Appearance scalar Visual* NORML NORM				. ,				
Silt scalar Visual* NONE NONE ODE NONE ODE NONE ODE ODE	There is no indication of any contamination in the oil.		la la	, ,				
Debris Scalar Visual* NONE VLITE Sand/Dirt Scalar Visual* NONE NONE NONE Scalar Visual* NORML NO		Silt	scalar	Visual*	NONE	NONE		
Appearance Scalar Visual* NORML NORM		Debris	scalar			VLITE		
Oddr Scalar Visual* NORML NORML NORML Emulsified Water Scalar Visual* >0.1 NEG		Sand/Dirt	scalar	Visual*	NONE	NONE		
Emulsified Water scalar Visual* >0.1 NEG		Appearance	scalar	Visual*	NORML	NORML		
Sodium ppm ASTM D5185(m) >25 1		Odor	scalar	Visual*	NORML	NORML		
Boron ppm ASTM D5185(m) 15 307 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 5 Manganese ppm ASTM D5185(m) 0 5 Magnesium ppm ASTM D5185(m) 0 5 Calcium ppm ASTM D5185(m) 5 19 Phosphorus ppm ASTM D5185(m) 600 1589 Zinc ppm ASTM D5185(m) 0 12 Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126		Emulsified Water	scalar	Visual*	>0.1	NEG		
Boron ppm ASTM D5185(m) 15 307 Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 5 Manganese ppm ASTM D5185(m) 0 5 Magnesium ppm ASTM D5185(m) 0 5 Calcium ppm ASTM D5185(m) 5 19 Phosphorus ppm ASTM D5185(m) 600 1589 Zinc ppm ASTM D5185(m) 0 12 Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126	FLUID CONDITION	Sodium	maa	ASTM D5185(m)	>25	1		
Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 0 5 Manganese ppm ASTM D5185(m) 0 5 Magnesium ppm ASTM D5185(m) 0 5 Calcium ppm ASTM D5185(m) 5 19 Phosphorus ppm ASTM D5185(m) 600 1589 Zinc ppm ASTM D5185(m) 0 12 Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126				. ,				
Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 5 Calcium ppm ASTM D5185(m) 5 19 Phosphorus ppm ASTM D5185(m) 600 1589 Zinc ppm ASTM D5185(m) 0 12 Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126	The condition of the oil is acceptable for the time in service.			, ,				
Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 5 Calcium ppm ASTM D5185(m) 5 19 Phosphorus ppm ASTM D5185(m) 600 1589 Zinc ppm ASTM D5185(m) 0 12 Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126		Molybdenum		ASTM D5185(m)	0	5		
Calcium ppm ASTM D5185(m) 5 19 Phosphorus ppm ASTM D5185(m) 600 1589 Zinc ppm ASTM D5185(m) 0 12 Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126		Manganese	ppm	ASTM D5185(m)		0		
Phosphorus ppm ASTM D5185(m) 600 1589 Zinc ppm ASTM D5185(m) 0 12 Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126		-	ppm	ASTM D5185(m)	0	5		
Zinc ppm ASTM D5185(m) 0 12 Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126		Calcium	ppm	ASTM D5185(m)	5	19		
Sulfur ppm ASTM D5185(m) 22000 18187 Visc @ 40°C cSt ASTM D7279(m) 140 126		Phosphorus	ppm	ASTM D5185(m)	600	1589		
Visc @ 40°C		Zinc	ppm	ASTM D5185(m)	0	12		
		Sulfur	ppm	ASTM D5185(m)	22000	18187		
		Visc @ 40°C	cSt	ASTM D7279(m)				





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number : 02637272 Unique Number : 5786434

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : LH0277073 Test Package : MOB 1

Received **Tested**

: 23 May 2024 Diagnosed

: 23 May 2024 - Wes Davis

: 23 May 2024

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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