

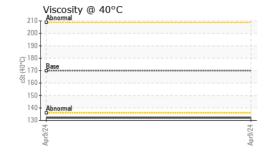
**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL** NORMAL

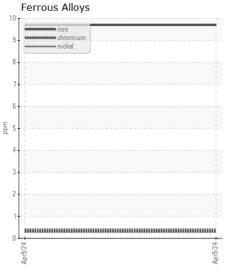


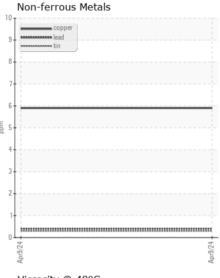
145797-1218 LIEBHERR LH80M 145797-1218

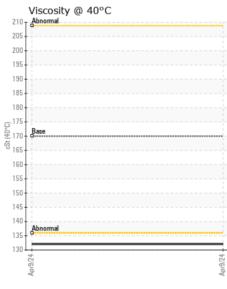
Rear Differential

Test	LIEBHERR GEAR BASIC 90 LS	6 ( GAL)						
Resample at the next service interval to monitor.   Sample Number   Client Info   0	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date   Cilient Info   09 Aproxed		Sample Number		Client Info			,	
Machine Age   hrs   Client Info   500	nesample at the next service interval to monitor.	Sample Date		Client Info		09 Apr 2024		
Filter Age			hrs	Client Info		-		
Oil Changed   Cilent Info   Not Changed   Cilent Info   Not Changed   Cilent Info   Sample Status   Not Changed   Cilent Info   Cilent Info   Not Changed   Cilent Info   Cilent Info		Oil Age	hrs	Client Info		500		
Filter Changed   Sample Status		Filter Age	hrs	Client Info		0		
NORMAL   N		Oil Changed		Client Info		Not Changd		
Iron		Filter Changed		Client Info		Not Changd		
All component wear rates are normal.    Chromium   ppm   ASTM D5185m   >5   <1		Sample Status				NORMAL		
Nickel   ppm   ASTM D5185m   >10   <1	WEAR	Iron	ppm	ASTM D5185m	>150	10		
Nickel   ppm   ASTM DS185m   >10   <1         Silver   ppm   ASTM DS185m   0         Silver   ppm   ASTM DS185m   0         Aluminum   ppm   ASTM DS185m   >5   2         Lead   ppm   ASTM DS185m   >5   2         Tin   ppm   ASTM DS185m   >5   <1         Vanadium   ppm   ASTM DS185m   >5   <1         Vanadium   ppm   ASTM DS185m   >5   <1         Vanadium   ppm   ASTM DS185m   >0         Value   NONE   NONE         Value   NONE   NONE   NONE         Vater   WC Method   >0.2   NEG         Silt   scalar   Visual   NONE   LIGHT         Appearance   scalar   Visual   NONE   NONE         Appearance   scalar   Visual   NORML   NORML   NORML         Appearance   scalar   Visual   NORML   NORML         Appearance		Chromium	ppm	ASTM D5185m	>5	<1		
Silver		Nickel	ppm	ASTM D5185m	>10	<1		
Aluminum   ppm   ASTM DS185m   >5   2		Titanium		ASTM D5185m		<1		
Lead		Silver	ppm	ASTM D5185m		0		
Copper		Aluminum	ppm	ASTM D5185m	>5	2		
Tin		Lead	ppm	ASTM D5185m	>5	<1		
Vanadium   ppm   ASTM D5185m   NONE   NONE		Copper	ppm	ASTM D5185m	>125	6		
White Metal   Yellow Metal   Scalar   Visual   NONE   NONE   NONE   Women		Tin	ppm	ASTM D5185m	>5	<1		
Yellow Metal   scalar   *Visual   NONE   NONE		Vanadium	ppm	ASTM D5185m		0		
Silicon   ppm   ASTM D5185m   >20   3		White Metal	scalar	*Visual	NONE	NONE		
Potassium		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium	CONTAMINATION	Silicon	nom	ASTM D5185m	>20	3		
Water   WC Method   >0.2   NEG         Silt   scalar   *Visual   NONE   LIGHT         Debris   scalar   *Visual   NONE   NONE         Sand/Dirt   scalar   *Visual   NONE   NONE         Appearance   scalar   *Visual   NORML   NOR								
Silt   scalar *Visual NONE   LIGHT         Debris   scalar *Visual NONE   NONE   NONE         Sand/Dirt   scalar *Visual NONE   NONE   NONE         Appearance   scalar *Visual NORM   NOR	There is no indication of any contamination in the oil.		la la					
Debris   Scalar   Visual   NONE   NONE   Sand/Dirt   Scalar   Visual   NONE   NONE   NONE   Sand/Dirt   Scalar   Visual   NONE   NONE   Scalar   Visual   NORML   NORML   Scalar   Visual   NORML   NORML   Scalar   Visual   NORML   NORML   Scalar   Visual   Scalar			scalar	*Visual				
Appearance   Scalar   *Visual   NORML   NORM		Debris	scalar					
Odor   Scalar   *Visual   NORML   NORML   NORML   Scalar   *Visual   NORML		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water   scalar *Visual   >0.2   NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium   ppm   ASTM D5185m   2		Odor	scalar	*Visual	NORML	NORML		
Boron   ppm   ASTM D5185m   0   146         Barium   ppm   ASTM D5185m   0   <1         Molybdenum   ppm   ASTM D5185m   0   6         Magnesium   ppm   ASTM D5185m   0   <1         Magnesium   ppm   ASTM D5185m   <1   34         Calcium   ppm   ASTM D5185m   <1   85         Phosphorus   ppm   ASTM D5185m   <1   57         Sulfur   ppm   ASTM D5185m   23468   20351         Visc @ 40°C   CSt   ASTM D445   170   132		Emulsified Water	scalar	*Visual	>0.2	NEG		
Boron   ppm   ASTM D5185m   0   146         Barium   ppm   ASTM D5185m   0   <1         Molybdenum   ppm   ASTM D5185m   0   6         Magnesium   ppm   ASTM D5185m   0   <1         Magnesium   ppm   ASTM D5185m   <1   34         Calcium   ppm   ASTM D5185m   <1   85         Phosphorus   ppm   ASTM D5185m   <1   57         Sulfur   ppm   ASTM D5185m   <23468   20351         Visc @ 40°C   CSt   ASTM D445   170   132	FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
Barium ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 0 6 Magnesium ppm ASTM D5185m 0 <1 34 Magnesium ppm ASTM D5185m <1 34 Magnesium ppm ASTM D5185m <1 85 Phosphorus ppm ASTM D5185m 2143 2401 Zinc ppm ASTM D5185m <1 57 Sulfur ppm ASTM D5185m <1 57 Sulfur ppm ASTM D5185m 23468 20351 Visc @ 40°C cSt ASTM D445 170 132		Boron			0	146		
Manganese         ppm         ASTM D5185m         0         <1	The condition of the on is acceptable for the time in service.	Barium						
Magnesium         ppm         ASTM D5185m         <1		Molybdenum	ppm	ASTM D5185m	0	6		
Calcium         ppm         ASTM D5185m         <1		Manganese	ppm	ASTM D5185m	0	<1		
Phosphorus         ppm         ASTM D5185m         2143         2401             Zinc         ppm         ASTM D5185m         <1		Magnesium	ppm	ASTM D5185m	<1	34		
Zinc         ppm         ASTM D5185m         <1		Calcium	ppm	ASTM D5185m	<1	85		
Sulfur         ppm         ASTM D5185m         23468         20351             Visc @ 40°C         cSt         ASTM D445         170         132		Phosphorus	ppm	ASTM D5185m	2143	2401		
Visc @ 40°C cSt ASTM D445 170 132		Zinc	ppm	ASTM D5185m	<1	57		
			ppm	ASTM D5185m	23468	20351		
		Visc @ 40°C	cSt	ASTM D445			:	











Certificate L2367

Laboratory Sample No.

: LH0257721 Lab Number : 06215149 Unique Number : 11088013 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Jun 2024 **Tested** : 20 Jun 2024

Diagnosed : 21 Jun 2024 - Sean Felton

**TEXAS PORT RECYCLING - HOUSTON PORT** 8945 MANCHESTER ST

HOUSTON, TX US 77012 Contact: Dale Shaw

F: (713)921-5545

dale.shaw@tmrecycling.com

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)