LIEBHERR

CONSTRUCTION EQUIPMENT

LIEBHERR L556 055501-1332 - Front Right Wheel Hub

Sample No: LH0254712

Oil Type: GEAR OIL LS 80W90

Sample Date 24 Sep 2023 22 Feb 2023 12 Aug 2022	ā					
Sample Date 24 Sep 2023 22 Feb 2023 12 Aug 2022	SAM	IPLE INFO	ORMATION			
Machine Hours	Sample Number		LH0254712	LH0254856	LH0220836	
Machine Hours	Sample Date		24 Sep 2023	22 Feb 2023	12 Aug 2022	
Oil Changed N/A	Machine Hours			5381	4360	
Oil CONDITION Oil CONDITION	Oil Hours		0	0	0	
Oil CONDITION Visc @ 40°C	Oil Changed		N/A	Changed	Changed	
CONTAMINATION Silicon ppm 3 5 9 9 Sodium ppm 0 1 0 4 2 Potassium ppm 0 55 149 242 Copper ppm 15 24 49 Clauminum ppm 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sample Status		NORMAL	NORMAL	NORMAL	
CONTAMINATION Silicon ppm 3 5 9 9 Sodium ppm 0 1 0 4 2 Potassium ppm 0 15 0 24 0 49 Lead ppm 0 15 0 4 0 2 Aluminum ppm 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	<u> </u>					
CONTAMINATION Silicon ppm 3 5 9 9 Sodium ppm 0 1 0 4 2 Potassium ppm 0 15 0 24 0 49 Lead ppm 0 15 0 4 0 2 Aluminum ppm 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	OIL	CONDITION	ON			
CONTAMINATION Silicon				0.100	0.475	
Silicon ppm 0 3	/ISC @ 40°C	CSI	193	0 180	0 1/5	
Silicon						
Sodium	CON	TAMIN/	ATION			
Sodium	Silicon	ppm	3	5	9	
WEAR METALS ron ppm ○ 55 ○ 149 ○ 242	Sodium	ppm	0 0		0 2	
Tron ppm 0 55 0 149 0 242 0	otassium	ppm	0 <1	O <1	O <1	
Tron	-					
Tron	WEA	D META	IS			
Copper ppm 15 24 49 Lead ppm 0 0 <1				0.440	0.040	
Lead					_	
Tin ppm < 1 <1 2 Aluminum ppm					-	
Aluminum ppm			_	_		
Chromium		ppm			_	
Molybdenum ppm		ppm			Ŭ	
Sickel ppm		ppm		O 1	1	
Fitanium ppm 0 0 0 5ilver ppm 0 0 0 Manganese ppm 0 2 7 13	Molybdenum	ppm	2	28	55	
Silver	Nickel	ppm	○ <1	O <1	O <1	
Manganese ppm 2 7 13 /anadium ppm 0 0 ADDITIVES Calcium ppm 10 18 45 Magnesium ppm 10 0 2 Zinc ppm 13 18 36	Γitanium	ppm	0	0	0	
ADDITIVES 0 0 0 Calcium ppm 10 18 45 Magnesium ppm <1 0 2 Zinc ppm 13 18 36	Silver	ppm	0	0	0	
ADDITIVES Calcium ppm 0 10 18 45 Magnesium ppm 0 < 1 0 2 Zinc ppm 0 13 18 36	Manganese	ppm	2	O 7	13	
Calcium ppm 10 18 45 Magnesium ppm <1 0 2 Zinc ppm 13 18 36	/anadium	ppm	0	0	0	
Calcium ppm 10 18 45 Magnesium ppm <1 0 2 Zinc ppm 13 18 36						
Magnesium ppm ○ <1 ○ 0 2 Zinc ppm ○ 13 ○ 18 36	ADD	ITIVES				
Magnesium ppm ○ <1 ○ 0 2 Zinc ppm ○ 13 ○ 18 36	Calcium	ppm	10	18	45	
Zinc ppm ① 13 ① 18 36	Magnesium		O <1	O 0	2	
	•			O 18	36	
	Phosphorus	ppm			2335	



INTERSTATE POWER SYSTEMS

407 ADVENTURLAND DR NE ALTOONA, IA

US 50009

Contact: DALTON JOHNSON dalton.johnson@istate.com

T: (515)957-3300

F:

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot:INTALTUnique No:10662049Signed:Sean FeltonReport Date:27 Sep 2023

2

 \bigcirc 0

ppm

ppm

Barium

Boron

LIEBHERR







GRAPHS

