CONSTRUCTION EQUIPMENT

LIEBHERR LH50 086895 - Hydraulic System

Sample No: LH

OII Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL

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U Sam	ple Informa	tion			ALL TROUGH
Sample Number		LH	LH0243007	 	344
Sample Date		22 Mar 2024	14 Jan 2023	 	LIEBHERR CANADA LTD.
Machine Hours		25110	22640	 	10374 267 ST.
Oil Hours		0	0	 	ACHESON, AB
Oil Changed		Changed	Not Changd	 	CA T7X 6A2
Sample Status		NORMAL	NORMAL	 	Contact: Dustin Fluet
					dustin.fluet@liebherr.com
Oil C	ondition				T: (780)962-6088
Visc @ 40°C	cSt	33.1	0 38.2	 	F: (780)962-6799
Cont	amination				Diagnosis
	%	NEG	NEG		Confirm the source of the lubricant
Water	%			 	being utilized for top-up/fill.
Particles >4µm		0 13429	0 1680	 	Resample at the next service interview
Particles >6µm		43	0 329	 	to monitor. The fluid was specified PETRO CANADA HYDREX XV AL
Particles >14µm		04	09	 	SEASON HYDRAULIC OIL,
SO 4406:1999 (0	,	21/13/9	18/16/10	 	however, a fluid match indicates th
Silicon	ppm	02	0 2	 	this fluid is ISO 32 AW Hydraulic O
Sodium	ppm	<mark></mark> <1 <1	0 1	 	Please confirm the oil type and gra
Potassium	ppm	<mark>○</mark> <1	○ <1	 	on your next sample.All componen
Ä					wear rates are normal. The system
	ar Metals				cleanliness is acceptable for your target ISO 4406 cleanliness code.
Iron	ppm	0 17	0 39	 	The system and fluid cleanliness is
Copper	ppm	02	02	 	acceptable. Viscosity of sample
Lead	ppm	0	○ <1	 	indicates oil is within ISO 32 range
Tin	ppm	0	0	 	advise investigate. This plus the
Aluminum	ppm	<1	0 <1	 	additive levels indicates that this is
Chromium	ppm	04	0 2	 	not the same brand, or type of oil a reported. The condition of the oil is
		-	-		
	maa	\bigcirc 0		 	accentable for the time in service
Molybdenum	mqq mqq	0	0 1	 	acceptable for the time in service.
Molybdenum Nickel	ppm	0			acceptable for the time in service.
Molybdenum Nickel Titanium	ppm ppm	0 0	○ 0 <1	 	acceptable for the time in service.
Molybdenum Nickel Titanium Silver	ppm ppm ppm	© 0 0 0	0 <1 0	 	acceptable for the time in service.
Molybdenum Nickel Titanium Silver Manganese	ppm ppm ppm ppm	0 0 0 <1	0 <1 0 () <1		acceptable for the time in service.
Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm	© 0 0 0	0 <1 0		acceptable for the time in service.
Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm	0 0 0 <1	0 <1 0 () <1		acceptable for the time in service.
Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm titives	© 0 0 0 <1 0	 ○ 0 <1 ○ <1 ○ 		acceptable for the time in service.
Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm	0 0 0 <1	0 <1 0 () <1		acceptable for the time in service.

 Depot:
 LIESPR

 Unique No:
 5761601

 Signed:
 Kevin Marson

 Report Date:
 15 Apr 2024

 Submitted By: Eric Beaulieu

347

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○ 502

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03

Phosphorus

Barium

Boron

ppm

ppm

ppm



LEBHERR CONSTRUCTION EQUIPMENT

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Graphs



Ferrous Alloys Particle Count 40 - 491,520--26 iron chromium 245,760 -25 35 nickel 30 122,880 -24 25 61,440 -23 표 20 30,720 -22 Ahnorm 15 15,360 -21 10 7,680 20 5 3,840 -19 0 18 🛛 1,920 Mar22/24 mber of particles (per 1 ml) Jan 14/23 4406:1999 Cleanliness 960-Non-ferrous Metals 480. 10 copper 240 9 nan lead -14 g tin 120 8 60. -13 6 30 -12 mdd 5 -11 15 3 8 ·10 2 4 .9 2 -8 0 Mar22/24 Jan 14/23 0**+** 4μ 71µ 21µ 38µ 14µ 6µ Viscosity @ 40°C 54 Abnormal 52 50 Bas 48 46 () 44 () 44 ts; 42 Abnormal 40 38 36 34 32 Mar22/24 4/23 Jan 1