Liebherr Oil Sampling Guidelines

Components	Crawler Loaders/Dozers	Wheel Loaders	Crawler Excavators	Wheeled Excavators	Sample Points	Hour Interval	Preferred Sampling Location	Comments
Engine	X[1]	X[1]	X[1]	X[1]	1	250 hrs	Dipstick tube	*(1) Reduce interval to 125 hrs if using diesel fuel with more than 0.5% Sulfur (by weight) or ambient temperature is less than 15 degrees (F)*
Hydraulic tank	X	X	X	X	1	500 hrs	Reservoir cap	*NOTE: 250 hours for high dust environments NOTE: Do not sample through filter openings*
Splitter box	X[2]	X[2]	X	X	1	1000 hrs	Dipstick tube	*(2) First 500 hrs, then every 1000 hrs*
Swing gear			X	X	1	500 hrs	Drain port	
Transmission		X[2]		X[3]	1	1000 hrs	Oil fill port	*(2) First 500 hrs, then every 1000 hrs* *(3) Excavator Models A900 to A934 Only*
Front/Rear Differential		X[2]		X[2]	2	1000 hrs	Oil fill port	*(2) First 500 hrs, then every 1000 hrs*
Final drives	X[2]		X[2]		2	1000 hrs	Oil fill port	*(2) First 500 hrs, then every 1000 hrs*
Wheel Hubs				X[2,4]	2	1000 hrs	Oil fill port	*(2) First 500 hrs, then every 1000 hrs* *(4) Wheel Hubs on Front (Steer Axle) Only*
Samplings first 1000 hrs.	***12***	***14***	***13***	***18***				
Samplings every 1000 hrs thereafter	***9***	***10***	***11***	***14***				

Crawler Loaders/Dozers	LR Series
Wheel Loaders	L Series
Crawler Excavators	R series & LHC Series
Wheeled Excavators	A Series & LHM Series

General Notes:
- Increase fluid sampling intervals for environments with high airborne particulate (dust) content.
- Standard Warrranty and Extended Warranty is contingent upon proper maintenance and oil sampling

Sampling Tips:
- Do not let the sample bottle become dirty or contaminated
- Ensure equipment to be sampled is at operating temperature
- Thoroughly clean around the sampling area before taking the sample
- Discharge a few ounces of liquid into a waste container before taking actual sample.
- DO NOT sample from the bottom of the component pan or reservoir or in the vicinity of a filter
- Always sample cleanest systems first (Hydraulic>Transmission>Engine>Axles)
- If using disposable sample tubing, use a new piece of tubing for each component being sampled
- Replace the cap on the sample bottle and tighten it immediately after taking the sample
- Place the unit ID and proper component name (as above) on the bottle before beginning the sample process