

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A934C 064064-1007 - Swing Drive

Sample No: LH0268386

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



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Sample Information

Sample Number	LH0268386	LH0272771	LH0254762	LH0243218
Sample Date	27 Jun 2024	21 Dec 2023	23 Jun 2023	10 Jan 2023
Machine Hours	26934	25949	24973	24002
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	NORMAL	ABNORMAL



Oil Condition

Visc @ 40°C	cSt	121	121	130	141
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Contamination

Water	%	NEG	NEG	NEG	0.304
Silicon	ppm	2	3	3	4
Sodium	ppm	<1	0	0	2
Potassium	ppm	1	1	2	3



Wear Metals

Iron	ppm	384	669	570	1020
Copper	ppm	135	186	111	152
Lead	ppm	0	<1	<1	1
Tin	ppm	9	14	8	12
Aluminum	ppm	<1	1	<1	1
Chromium	ppm	2	5	4	7
Molybdenum	ppm	0	1	<1	1
Nickel	ppm	1	2	1	1
Titanium	ppm	<1	1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	3	6	5	8
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	52	87	40	68
Magnesium	ppm	8	11	8	8
Zinc	ppm	33	83	49	27
Phosphorus	ppm	931	761	816	654
Barium	ppm	0	1	1	0
Boron	ppm	0	6	7	21

Diagnosis

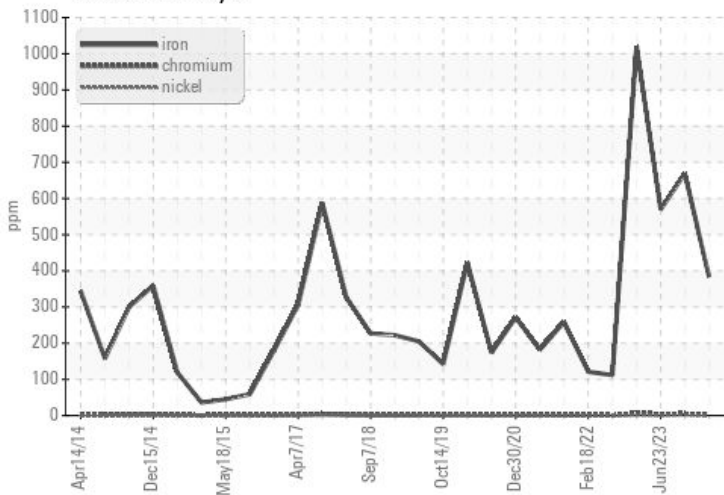
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Moderate concentration of visible metal present. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008
 Unique No: 11126021
 Signed: Don Baldrige
 Report Date: 17 Jul 2024

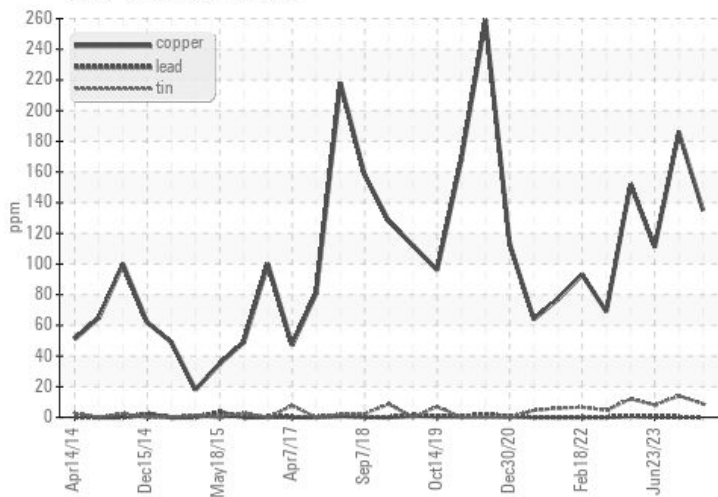


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

