

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R934 036784 - Swing Drive

Sample No: LH0070662

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



SAMPLE INFORMATION

Sample Number	LH0070662	---	---	---
Sample Date	25 Oct 2013	---	---	---
Machine Hours	477	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

LIEBHERR CANADA LTD.

10374 267 ST.
ACHESON, AB
CA T7X 6A2
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OIL CONDITION

Visc @ 40°C	cSt	● 170	---	---	---
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CONTAMINATION

Silicon	ppm	● 1	---	---	---
Sodium	ppm	● 3	---	---	---
Potassium	ppm	● 2	---	---	---



WEAR METALS

Iron	ppm	● 173	---	---	---
Copper	ppm	● 20	---	---	---
Lead	ppm	● <1	---	---	---
Tin	ppm	● <1	---	---	---
Aluminum	ppm	● <1	---	---	---
Chromium	ppm	● <1	---	---	---
Molybdenum	ppm	● <1	---	---	---
Nickel	ppm	● <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	● 3	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	● 11	---	---	---
Magnesium	ppm	● 2	---	---	---
Zinc	ppm	● 18	---	---	---
Phosphorus	ppm	2257	---	---	---
Barium	ppm	● 14	---	---	---
Boron	ppm	● 6	---	---	---

Diagnosis

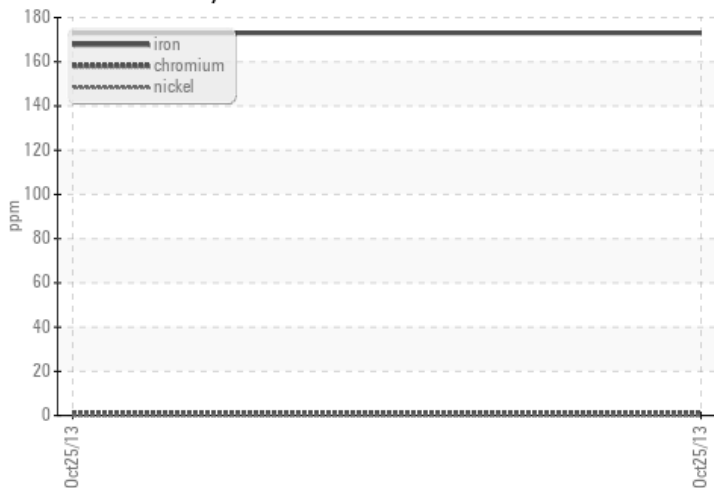
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The condition of the oil is acceptable for the time in service.

Depot: LIESPR
Unique No: 3827161
Signed: Bill Quesnel
Report Date: 12 Nov 2013

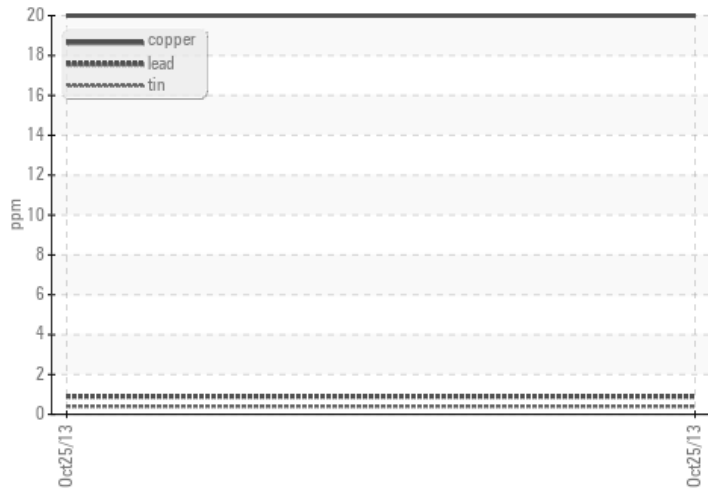


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

