

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R934 036784 - Left Planetary

Sample No: LH0070666

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



SAMPLE INFORMATION

Sample Number	LH0070666	---	---	---
Sample Date	25 Oct 2013	---	---	---
Machine Hours	477	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

LIEBHERR CANADA LTD.

10374 267 ST.
ACHESON, AB
CA T7X 6A2
Contact: Rodney Budzak
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OIL CONDITION

Visc @ 40°C	cSt	● 124	---	---	---
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CONTAMINATION

Silicon	ppm	● 21	---	---	---
Sodium	ppm	● 6	---	---	---
Potassium	ppm	● 8	---	---	---



WEAR METALS

Iron	ppm	● 173	---	---	---
Copper	ppm	● 28	---	---	---
Lead	ppm	● 1	---	---	---
Tin	ppm	● 1	---	---	---
Aluminum	ppm	● 3	---	---	---
Chromium	ppm	● 5	---	---	---
Molybdenum	ppm	● <1	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	● 3	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	● 156	---	---	---
Magnesium	ppm	● 3	---	---	---
Zinc	ppm	● 166	---	---	---
Phosphorus	ppm	● 1324	---	---	---
Barium	ppm	● 3	---	---	---
Boron	ppm	● 3	---	---	---

Diagnosis

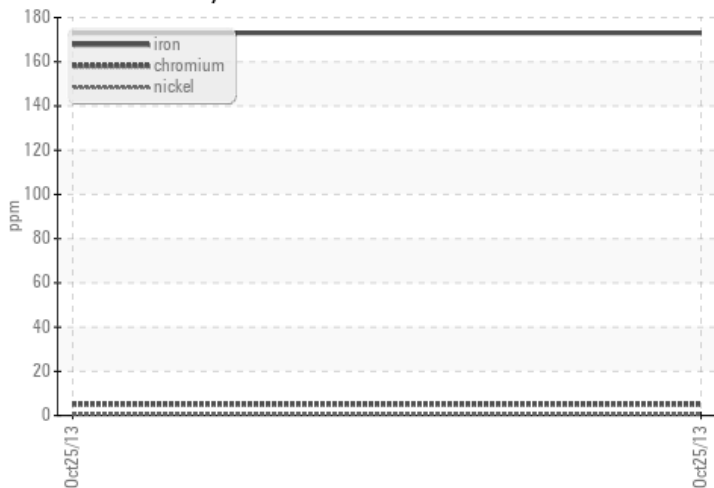
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot: LIESPR
Unique No: 3827159
Signed: Kevin Marson
Report Date: 12 Nov 2013

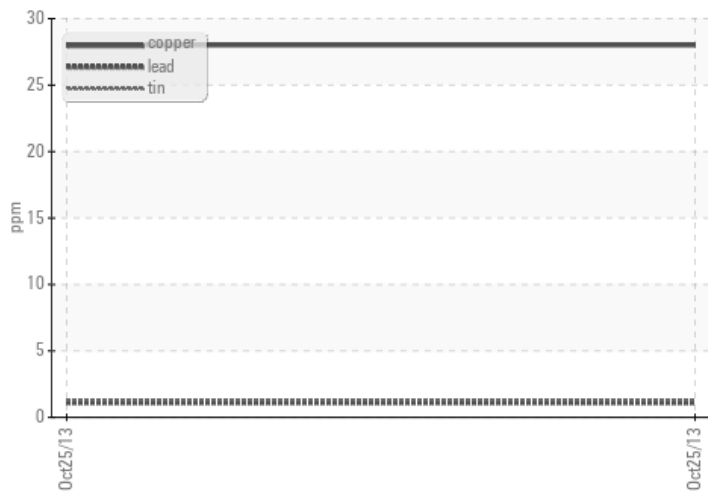


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

