

LIEBHERR

CONSTRUCTION EQUIPMENT



L90 - Diesel Engine

Sample No: LH0265886

Oil Type: DIESEL ENGINE OIL SAE 15W40



SAMPLE INFORMATION

Sample Number	LH0265886	---	---	---
Sample Date	01 Sep 2023	---	---	---
Machine Hours	0	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

Gerdau - Mandak Metal Processors Ltd.,
 1 Railway St., P.O. Box 334
 Selkirk, MB
 CA R1A 2B3
 Contact: Rolyn De La Cruz
 rolyn.delacruz@gerdau.com
 T:
 F: (204)482-8241



OIL CONDITION

Visc @ 100°C	cSt	12.0	---	---	---
Oxidation (PA)	%	98	---	---	---



CONTAMINATION

Soot %	%	0.7	---	---	---
Nitration (PA)	%	102	---	---	---
Sulfation (PA)	%	68	---	---	---
Glycol	%	0.0	---	---	---
Fuel	%	5.6	---	---	---
Silicon	ppm	15	---	---	---
Sodium	ppm	20	---	---	---
Potassium	ppm	2	---	---	---

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.



WEAR METALS

Iron	ppm	76	---	---	---
Copper	ppm	4	---	---	---
Lead	ppm	4	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	6	---	---	---
Chromium	ppm	2	---	---	---
Molybdenum	ppm	48	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	1467	---	---	---
Magnesium	ppm	700	---	---	---
Zinc	ppm	1152	---	---	---
Phosphorus	ppm	1007	---	---	---
Barium	ppm	<1	---	---	---
Boron	ppm	17	---	---	---

Depot: MANSEL
Unique No: 5642298
Signed: Kevin Marson
Report Date: 12 Sep 2023



GRAPHS

