

LIEBHERR

CONSTRUCTION EQUIPMENT



[(365657)] LIEBHERR L546 060943-1755 - Diesel Engine

Sample No: LH0221376

Oil Type: DIESEL ENGINE OIL SAE 15W40



SAMPLE INFORMATION

Sample Number	LH0221376	LH0221368	LH0221412	---
Sample Date	05 Oct 2023	24 Oct 2022	30 Jan 2022	---
Machine Hours	1467	1000	0	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	N/A	---
Sample Status	MARGINAL	NORMAL	NORMAL	---

NEUDORF FARMING C/O ESSO
920 RAILWAY STREET
CROSSFIELD, AB
CA T0M 0S0
Contact: Service Manager



OIL CONDITION

Visc @ 100°C	cSt	13.5	13.4	13.3	---
Oxidation (PA)	%	86	70	62	---

T:
F:



CONTAMINATION

Water	%	0.189	---	---	---
Soot %	%	0.4	0	0	---
Nitration (PA)	%	98	93	81	---
Sulfation (PA)	%	73	65	58	---
Glycol	%	0.0	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	8	6	4	---
Sodium	ppm	9	6	4	---
Potassium	ppm	4	3	3	---

Diagnosis

All component wear rates are normal. There is a trace of moisture present in the oil. Test for glycol is negative. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	51	29	17	---
Copper	ppm	6	19	16	---
Lead	ppm	3	<1	<1	---
Tin	ppm	1	1	1	---
Aluminum	ppm	2	2	1	---
Chromium	ppm	1	<1	<1	---
Molybdenum	ppm	7	15	15	---
Nickel	ppm	3	2	2	---
Titanium	ppm	0	<1	0	---
Silver	ppm	<1	0	0	---
Manganese	ppm	<1	1	<1	---
Vanadium	ppm	0	0	<1	---



ADDITIVES

Calcium	ppm	1444	1456	1350	---
Magnesium	ppm	765	752	758	---
Zinc	ppm	870	840	829	---
Phosphorus	ppm	750	783	748	---
Barium	ppm	<1	0	0	---
Boron	ppm	23	38	59	---

Depot: NEUCRO
Unique No: 5659293
Signed: Kevin Marson
Report Date: 20 Oct 2023



GRAPHS

