

LIEBHERR

CONSTRUCTION EQUIPMENT



[(358362)] LIEBHERR R930 052244-1716 - Diesel Engine

Sample No: LH0281064

Oil Type: PETRO CANADA 10W40



HAYSHAKERS BOBCAT SERVICES
 501 761 HWY
 LESLIEVILLE, AB
 CA T0M 1H0
 Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0281064	LH0225005	---	---
Sample Date	19 Feb 2024	18 May 2023	---	---
Machine Hours	1457	1024	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---



OIL CONDITION

Visc @ 100°C	cSt	13.4	11.6	---	---
Oxidation (PA)	%	61	84	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0	0	---	---
Nitration (PA)	%	57	78	---	---
Sulfation (PA)	%	53	59	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	1.1	---	---
Silicon	ppm	6	9	---	---
Sodium	ppm	1	4	---	---
Potassium	ppm	<1	<1	---	---



WEAR METALS

Iron	ppm	4	6	---	---
Copper	ppm	16	115	---	---
Lead	ppm	<1	4	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	2	2	---	---
Chromium	ppm	0	<1	---	---
Molybdenum	ppm	58	58	---	---
Nickel	ppm	<1	0	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	0	<1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	1035	916	---	---
Magnesium	ppm	970	1128	---	---
Zinc	ppm	1158	1232	---	---
Phosphorus	ppm	1009	1108	---	---
Barium	ppm	<1	2	---	---
Boron	ppm	3	45	---	---

T:
F:

Diagnosis

Resample at the next service interval to monitor. 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: HAYLES
 Unique No: 5733696
 Signed: Wes Davis
 Report Date: 20 Feb 2024



GRAPHS

