

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR766 024157-1681 - Diesel Engine

Sample No: LH0269729

Oil Type: MOBIL 1 FS 0W40



NUTRIEN CORY POTASH
 12KM WEST OF SASKATOON HWY #7
 SASKATOON, SK
 CA S7K 3L6
 Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0269729	LH0269726	LH0269746	---
Sample Date	07 Nov 2023	23 Oct 2023	04 Aug 2023	---
Machine Hours	1018	944	0	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Not Changd	Not Changd	---
Sample Status	NORMAL	ABNORMAL	SEVERE	---



OIL CONDITION

Visc @ 100°C	cSt	11.7	11.8	13.8	---
Oxidation (PA)	%	68	67	69	---



CONTAMINATION

Water	%	NEG	NEG	0.332	---
Soot %	%	0	0	0	---
Nitration (PA)	%	57	53	66	---
Sulfation (PA)	%	55	55	57	---
Glycol	%	NEG	NEG	0.0	---
Fuel	%	<1.0	0.7	<1.0	---
Silicon	ppm	10	8	84	---
Sodium	ppm	5	5	656	---
Potassium	ppm	5	4	476	---



WEAR METALS

Iron	ppm	12	8	128	---
Copper	ppm	15	11	160	---
Lead	ppm	2	1	35	---
Tin	ppm	1	<1	6	---
Aluminum	ppm	1	1	36	---
Chromium	ppm	0	0	4	---
Molybdenum	ppm	51	50	4	---
Nickel	ppm	0	0	<1	---
Titanium	ppm	0	0	2	---
Silver	ppm	<1	<1	<1	---
Manganese	ppm	1	<1	3	---
Vanadium	ppm	0	0	<1	---



ADDITIVES

Calcium	ppm	890	880	2027	---
Magnesium	ppm	1086	1073	117	---
Zinc	ppm	1155	1145	982	---
Phosphorus	ppm	994	994	923	---
Barium	ppm	10	7	1	---
Boron	ppm	65	67	10	---

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: NUT12SAS
 Unique No: 5683847
 Signed: Kevin Marson
 Report Date: 24 Nov 2023



GRAPHS

