

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR776 25121-1296 - Diesel Engine

Sample No: LH0265074

Oil Type: PETRO CANADA DURON HP 15W40



KMC MINING CORPORATION
 28712 114 AVENUE
 ACHESON, AB
 CA T7X 6E6
 Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0265074	LH0265075	---	---
Sample Date	17 Oct 2023	17 Oct 2023	---	---
Machine Hours	1072	1072	---	---
Oil Hours	0	0	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	SEVERE	SEVERE	---	---



OIL CONDITION

Visc @ 100°C	cSt	17.3	17.3	---	---
Oxidation (PA)	%	48	52	---	---



CONTAMINATION

Soot %	%	0	0	---	---
Nitration (PA)	%	44	48	---	---
Sulfation (PA)	%	47	49	---	---
Glycol	%	0.666	0.665	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	9	9	---	---
Sodium	ppm	378	385	---	---
Potassium	ppm	46	47	---	---



WEAR METALS

Iron	ppm	4	4	---	---
Copper	ppm	104	106	---	---
Lead	ppm	3	3	---	---
Tin	ppm	0	0	---	---
Aluminum	ppm	1	1	---	---
Chromium	ppm	0	0	---	---
Molybdenum	ppm	56	57	---	---
Nickel	ppm	<1	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	<1	<1	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	962	972	---	---
Magnesium	ppm	849	867	---	---
Zinc	ppm	1115	1134	---	---
Phosphorus	ppm	968	998	---	---
Barium	ppm	<1	<1	---	---
Boron	ppm	4	4	---	---

T:
F:

Diagnosis

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. All component wear rates are normal. Test for glycol is positive. There is a high concentration of glycol present in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: KMCACH
 Unique No: 5667960
 Signed: Kevin Marson
 Report Date: 23 Oct 2023



GRAPHS

