

LIEBHERR LH50 137429 - Diesel Engine

Sample No: LH0281413

-

Oil Type: DIESEL ENGINE OIL SAE 40

SAMPLE INFORMATION

Sample Number	LH0281413	LH0274497	LH0251871	LH0251475
Sample Date	07 Dec 2023	20 Aug 2023	23 Feb 2023	16 Jan 2023
Machine Hours	7578	6359	4360	3821
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL
OIL CONI	DITION			
Visc @ 100°C cSt	0 12.9	12.6	0 13.1	13.0
Oxidation (PA) %	75	74	70	67

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	73	74	75	72
Sulfation (PA)	%	56	59	59	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	9	7
Sodium	ppm	0 2	02	0 1	2
Potassium	ppm	0	◯ <1	◯ <1	◯ <1

WEA	R META	LS			
Iron	ppm	04	0 4	0 4	03
Copper	ppm	0 2	0 2	02	02
Lead	ppm	○ <1	◯ <1	◯ <1	◯ <1
Tin	ppm	0 (○ <1	◯ <1	◯ <1
Aluminum	ppm	01	◯ <1	0 1	01
Chromium	ppm	0 (○ <1	0	0
Molybdenum	ppm	0 58	60	58	59
Nickel	ppm	<mark></mark> <1	0	0	◯ <1
Titanium	ppm	0 (0	<1	<1
Silver	ppm	<mark>()</mark> <1	0	0	0
Manganese	ppm	0	◯ <1	◯ <1	◯ <1
Vanadium	ppm	0	0	0	0

ADDITIVES					
Calcium	ppm	0 1172	0 1082	0 1104	1143
Magnesium	ppm	933	0 1006	978	967
Zinc	ppm	0 1199	1226	0 1216	0 1219
Phosphorus	ppm	971	0 1098	○ 1101	0 1096
Barium	ppm	◯ <1	0	0	0
Boron	ppm	3	2	01	6



COMWES





CMI - COMBINED METAL INDUSTRIES 505 GARY RAY DRIVE

NORTH YORK, ON CA M9L 1P9 Contact: Greg Sacher gsacher@combinedmetal.com T: (416)642-7262 F:

Diagnosis

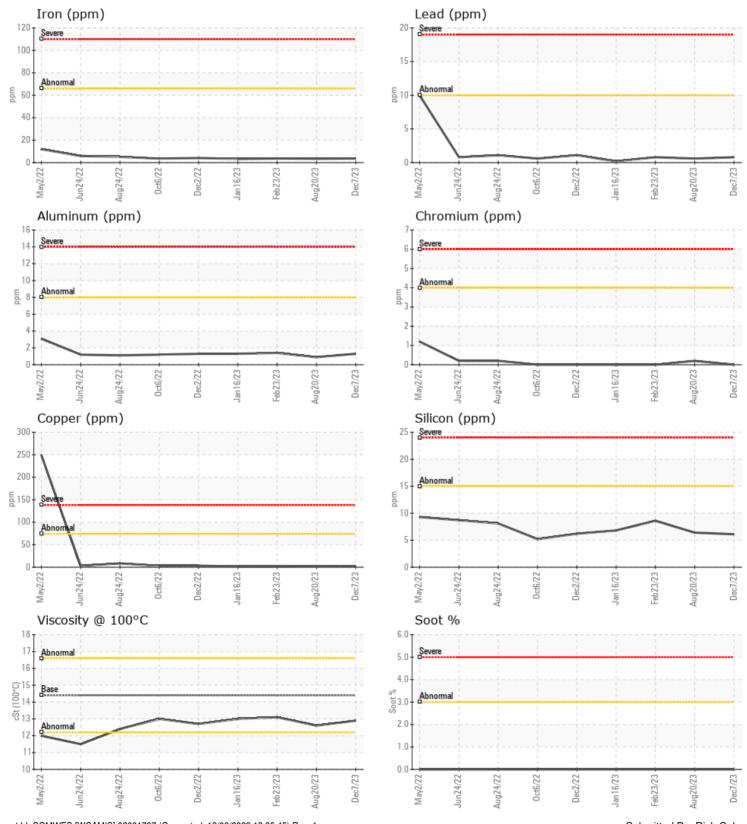
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





GRAPHS

O



Report Id: COMWES [WCAMIS] 02601797 (Generated: 12/08/2023 13:35:45) Rev: 1