

LIEBHERR

CONSTRUCTION EQUIPMENT



PERKINS 1104C-44 44-1104C - Diesel Engine

Sample No: LH0256649

Oil Type: CHEVRON 15W40



SAMPLE INFORMATION

Sample Number	LH0256649	LH0178477	LH0155572	LH0155579
Sample Date	18 Jan 2024	04 Oct 2021	11 Dec 2020	10 Feb 2020
Machine Hours	11250	250	8000	9512
Oil Hours	250	0	250	508
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

CRAWFORD METAL CORPORATION
 300 COLLEGE STREET EAST
 BELLEVILLE, ON
 CA K8N 5B3
 Contact: Shawna Geen
 belleville@crawfordmetal.com
 T:
 F: (613)966-9954



OIL CONDITION

Visc @ 100°C	cSt	13.0	12.9	13.2	13.2
Oxidation (PA)	%	68	69	67	67



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0	0	0
Nitration (PA)	%	61	61	58	65
Sulfation (PA)	%	63	65	64	75
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	16	8	6	7
Sodium	ppm	4	2	2	1
Potassium	ppm	3	2	<1	1

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.



WEAR METALS

Iron	ppm	30	14	11	29
Copper	ppm	3	2	1	2
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	9	5	4	5
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	122	114	109	111
Nickel	ppm	2	<1	<1	<1
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	<1	<1



ADDITIVES

Calcium	ppm	1623	1529	1543	1577
Magnesium	ppm	633	631	615	602
Zinc	ppm	850	951	951	972
Phosphorus	ppm	747	836	773	820
Barium	ppm	0	0	0	0
Boron	ppm	344	384	359	408

Depot: CRABEL
 Unique No: 5722185
 Signed: Wes Davis
 Report Date: 02 Feb 2024



GRAPHS

