

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R974CEW 044496-1084 - Diesel Engine

Sample No: LH0260968

Oil Type: DIESEL ENGINE OIL SAE 15W40



#### SAMPLE INFORMATION

Sample Number	LH0260968	LH0260777	LH0136032	LH
Sample Date	23 Jun 2023	25 May 2023	17 Aug 2022	28 May 2021
Machine Hours	0	11735	11198	0
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

**QIT - Rio Tinto Fer et Titane Inc.**

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#### OIL CONDITION

Visc @ 100°C	cSt	14.0	12.5	16.5	15.3
Oxidation (PA)	%	55	64	90	98



#### CONTAMINATION

Soot %	%	0	2.5	2.9	0
Nitration (PA)	%	43	73	113	95
Sulfation (PA)	%	50	66	88	70
Glycol	%	0.0	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	10	4	4	4
Sodium	ppm	5	4	3	2
Potassium	ppm	12	<1	2	<1

#### Diagnosis

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. Les taux d'usure de tous les composants sont normaux. Il n'y a aucun indice de contamination dans l'huile. L'état de l'huile est acceptable pour la durée de service.



#### WEAR METALS

Iron	ppm	9	22	44	10
Copper	ppm	6	1	5	2
Lead	ppm	<1	0	2	4
Tin	ppm	<1	0	<1	<1
Aluminum	ppm	2	2	3	2
Chromium	ppm	<1	<1	1	<1
Molybdenum	ppm	49	58	6	28
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	1	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	1135	1009	2657	2151
Magnesium	ppm	946	1004	52	427
Zinc	ppm	1126	1172	1259	1354
Phosphorus	ppm	1037	1072	1033	1178
Barium	ppm	21	0	0	0
Boron	ppm	28	34	5	4

Depot: QITGARAGE

Unique No: 5607603

Signed: Wes Davis

Report Date: 18 Jul 2023



### GRAPHS

