

LubAnac references : WIDA ---1 --20**Your references :**Machine: Engine on natural gas / 20V4000 - C-3 / MTU 20V4000 - C-3 / GAS ENGINE**Make and type:**

Machine: MTU 20V4000

FEROZE 1888 MILLS - C-3 UNIT / PK-PAKISTAN

Diagnosis date: 12 may 2025

Oil : Total Nateria MP 40

	GAS	GAS	GAS	GAS	GAS
Sample date	06-FEB-25	11-MAR-25	08-APR-25	21-APR-25	06-MAY-25
Sample Number	TP25997	TP24002	TP23995	TP24003	TP28016
Interm. sample	X	X	X	X	X
Machine working hours	55820 H	56605 H	57190 H	57500 H	57845 H
Oil operation hours	1604 H	397 H	982 H	1292 H	1637 H
Oil consumption	315 Litres		86 Litres	131 Litres	206 Litres

Wear

Iron	ppm	3	1	4	5
Lead	ppm	1	< 1	< 1	1
Copper	ppm	1	< 1	1	1
Tin	ppm	< 1	< 1	2	2
Chromium	ppm	< 1	< 1	< 1	< 1
Aluminium	ppm	2	1	2	2
Nickel	ppm	< 1	< 1	< 1	< 1

Contamination

Silicon	ppm	2	< 1	1	1
Water	%	<0.07	<0.07	<0.07	<0.07
Cooling liquid		OK	OK	OK	OK

Oil

B.N.	mgKOH/g	2.7	3.7	3.0	3.0	2.5
A.N.	mgKOH/g	2.65	1.70	2.33	2.34	2.76
IpH		5.20	5.80	5.40	5.30	5.00
Visc. 40°C	mm2/s	145.0	134.0	144.7	148.6	152.7
Visc. 100°C	mm2/s	15.2	14.4	15.1	15.4	15.7
Visc. Index		106	106	105	105	106
Oxidation	A/cm	15.4	9.5	14.5	17.1	20.6
Nitration	A/cm	7.9	3.8	7.2	9.0	10.4

Additives

Calcium	ppm	1286	1355	1276	1277	1266
Zinc	ppm	294	341	302	301	281
Phosphorus	ppm	201	255	199	202	189
Magnesium	ppm	4	4	4	4	4
Molybdenum	ppm	0	0	0	0	0
Boron	ppm	0	0	0	0	0
Sodium	ppm	1	1	2	3	6
Potassium	ppm	0	0	0	0	0
Lithium	ppm	-	-	-	-	-
Barium	ppm	0	0	0	0	0
Vanadium	ppm	0	0	0	0	0

Interpretation of the diagnosis

- BN is slightly low
- Oxidation is too high
- We advise you to drain this oil.