

System: HYDRAULISCH SYSTEEM  
 Sump Capacity: ?  
 Lubricant: UNIL HYDRO S ISO 46  
 Labocodenbr: 114652-PP.4  
 Samplenummer: 03.04.23 L019  
 Labelnummer: 99999999  
 Date sample drawn: 23.03.2023  
 Sampling: by client

Customer: ISO 17025 AMS  
 Address: Bergensesteenweg 713  
 B- 1600 Sint-Pieters-Leeuw  
 Your customer: HYDRO S46 IC  
 Your ref.:



Oil



Pollution



Wear



### Diagnostic

The oil is in good condition and the wear metals are considered normal. The particle pollution level is normal, indicating an appropriate filtration.

Normal

Results:	Method*	Unit	Current sample					03.04.23 L019
Analysis date			3/04/2023	24/03/2023	16/03/2023	13/03/2023	2/03/2023	24/02/2023
Date of receipt			3/04/2023	24/03/2023	16/03/2023	13/03/2023	2/03/2023	24/02/2023
Sample date			23/03/2023	23/03/2022	23/03/2022	23/03/2022	23/03/2022	23/03/2022
H/Km Oil			?	?	?	?	?	?
H/Km total			?	?	?	?	?	?
Top up			?	?	?	?	?	?

### Oil Condition:

Viscosity at 40°C	ASTM D7279	cSt	45.8	46.2	45.8	45.7	46.1	45.6
Viscosity at 100°C	ASTM D7279	cSt	7.1	7.0	7.1	7.0	7.1	7.1
Viscosity-index	ASTM D2270		114	109	114	111	113	115
Fuel dilution	ASTM D7593	%						
AN	ASTM D8045	mg KOH/g	0.15	0.18	0.14	0.15	0.16	0.15
BN	ASTM D2896B	mg KOH/g						
Oxidation	ASTM E2412 (A)	Abs/0.1mm	2.5	2.5	2.5	2.4	3.8	2.5
Nitration	ASTM E2412	Abs/0.1mm	2.7	2.7	2.7	2.7	2.7	2.9
PMCC	ASTM D93	°C						
COC	ASTM D92B	°C						
Color	ASTM D1500		1.0	1.0	1.5	1.0	1.5	1.5

### Additives:

Ba: Barium	ASTM D5185	ppm	< 1	< 1	< 1	< 1	< 1	< 1
Ca: Calcium	ASTM D5185 (A)	ppm	40	41	43	42	40	42
Mg: Magnesium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
P: Phosphorus	ASTM D5185 (A)	ppm	72	70	72	71	70	69
S: Sulfur	ASTM D5185	%	0.52	0.55	0.56	0.54	0.56	0.55
Zn: Zink	ASTM D5185 (A)	ppm	18	16	16	16	16	16

### Pollution:

Si: Silicium	ASTM D5185 (A)	ppm	< 10	< 10	< 10	< 10	< 10	< 10
B: Boron	ASTM D5185	ppm	2	1	1	2	1	3
Na: Sodium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Water	WI-0002	%						
Water (KF)	ASTM D6304C	ppm	41	27	30	12	18	20
Soot content	ASTM E2412 (A)	%						
Antifreeze	ASTM D2982A							
PC ISO grade	ASTM D7647 (A)		19/16/11	18/15/10	19/16/11	18/15/11	18/16/10	18/15/10
PC Cleanliness class	ASTM D7647 (A)		9 A	8 A	9 A	9 F	9 A	8 A
Insolubles	ASTM D4898	mg/l						

### Wear metals:

Al: Aluminium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Cr: Chromium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Cu: Copper	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Fe: Iron	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Mo: Molybdenum	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Pb: Lead	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Sn: Tin	ASTM D5185	ppm	< 1	< 1	< 1	< 1	< 1	1
PQ index	WI-0021							

These conclusions are based on the supplied samples and information where the representativeness and validity cannot be guaranteed. Opinions and interpretation are outside the scope of accreditation. The measurement uncertainty is available on request. Samples are destroyed 2 months after receipt. The report may only be reproduced complete. Distribution on the responsibility of the client. \*Methods are modified according to specified method. (A)Accreditation. (U)Outsourced.

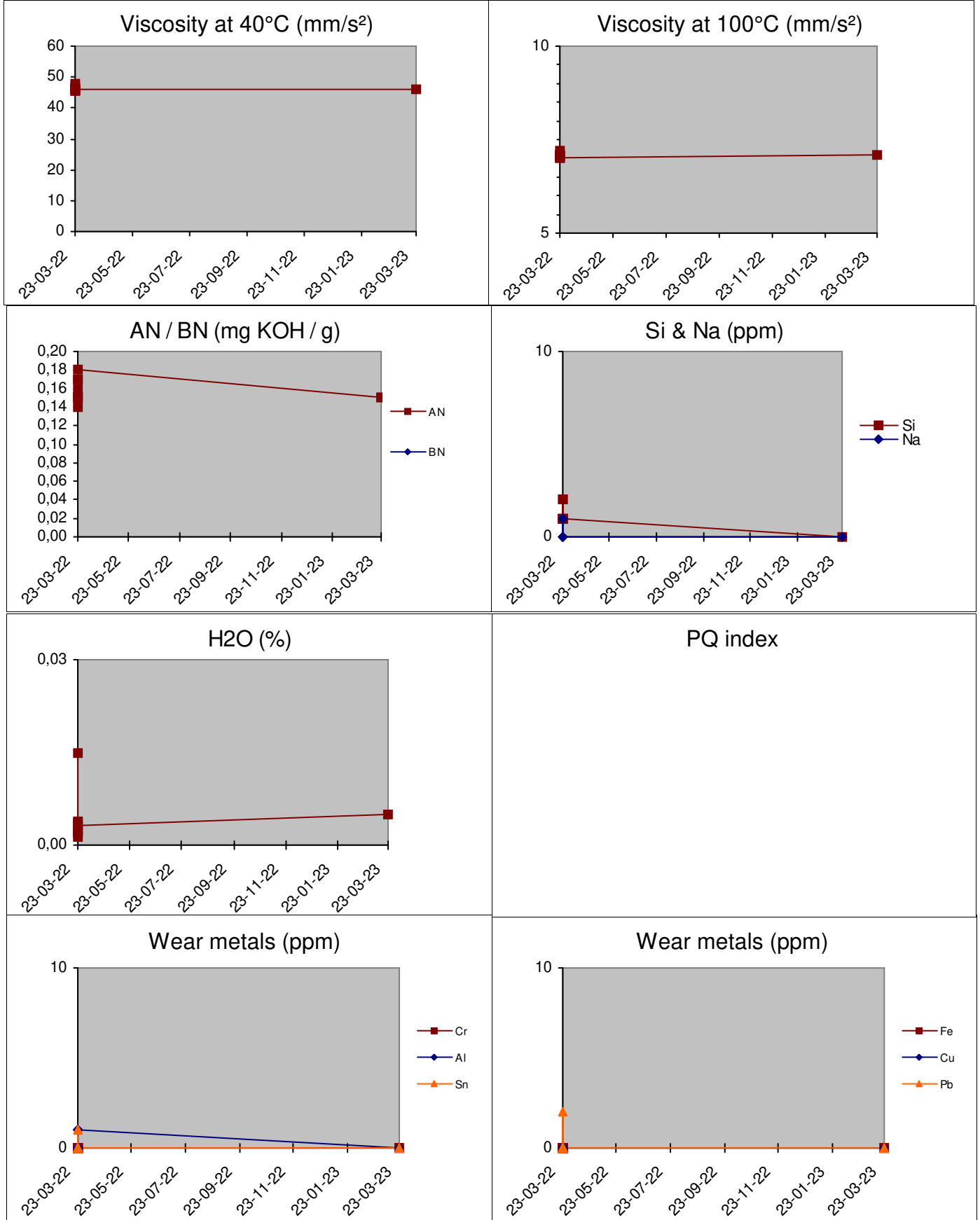
Batch: 2309601 - p.1 / 3

Diagnosis: ANW

Date of issue: 06/04/2023

B-20 ALPHA MAINTENANCE SYST..

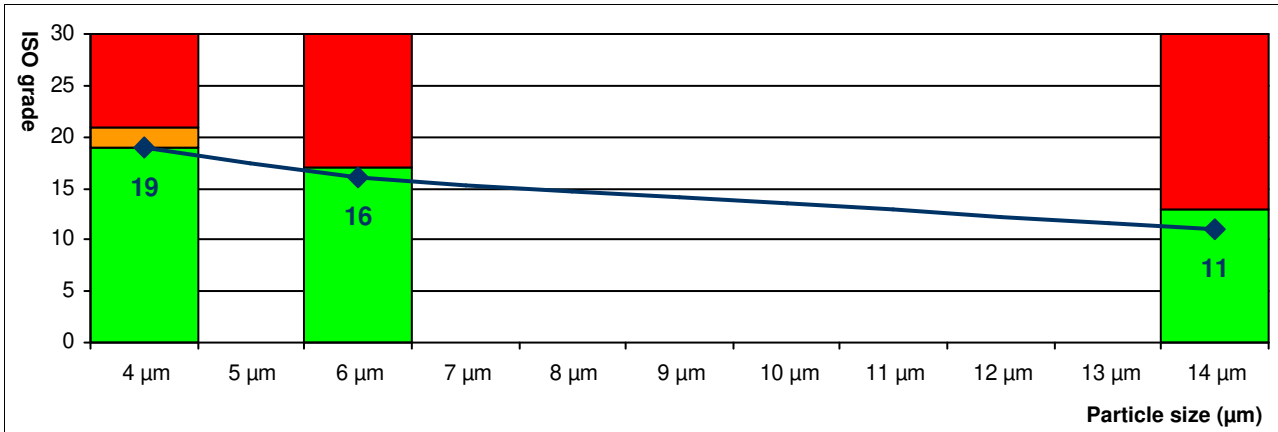
History 03.04.23 L019



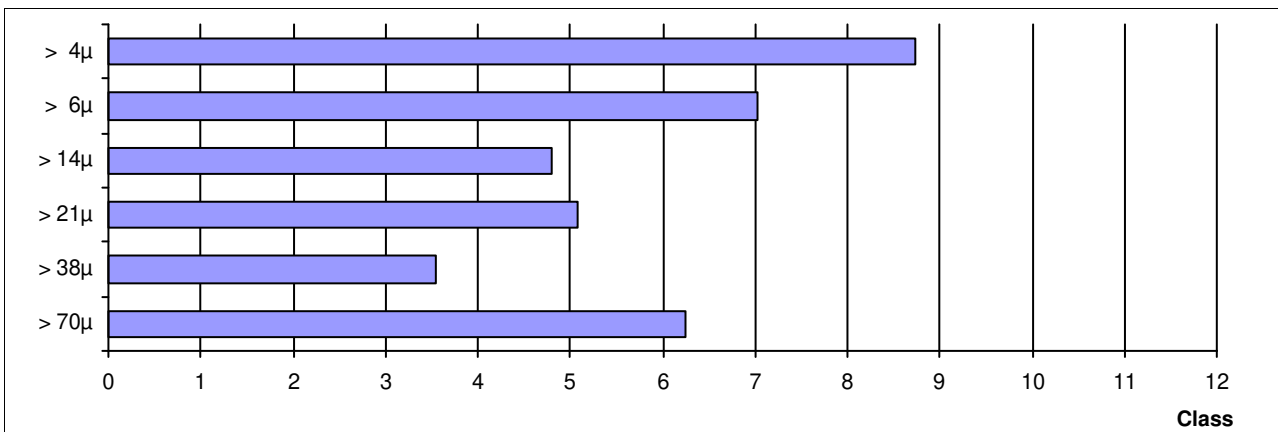
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<b>ISO score (A)</b>	<b>19 / 16 / 11</b>
<b>AS4059 class (A)</b>	<b>9 A</b>

ISO score (A) (4406:2021)	Particles / 100ml	Score
> 4µ (A)	348240	19
> 6µ (A)	39960	16
> 14µ (A)	1550	11
> 21µ (A)	330	
> 38µ (A)	20	
> 70µ (A)	20	



AS4059 class (A)	Particles / 100ml	Class
A:	> 4µ (A) 348240	A9
B:	> 6µ (A) 39960	B8
C:	> 14µ (A) 1550	C5
D:	> 21µ (A) 330	D6
E:	> 38µ (A) 20	E4
F:	> 70µ (A) 20	F7



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