

System: HYDRAULISCH SYSTEEM
 Sump Capacity (k): ?
 Lubricant (k): UNIL HYDRO S ISO 46
 Labocodenbr: 114652-PP.4
 Samplenummer: 16.11.23 L003
 Labelnummer: 201001109366
 Date sample drawn (k): 23.03.2022
 Sampling: by client

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



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						16.11.23 L003
Analysis date			16/11/2023	8/11/2023	26/10/2023	13/10/2023	19/10/2023	10/10/2023	
Date of receipt			16/11/2023	8/11/2023	26/10/2023	13/10/2023	19/10/2023	10/10/2023	
Sample date (k)			23/03/2022	23/03/2022	23/03/2022	23/03/2022	23/03/2022	23/03/2022	
H/Km Oil (k)			?	?	?	?	?	?	
H/Km total (k)			?	?	?	?	?	?	
Top up (k)			?	?	?	?	?	?	

Oil Condition:

Viscosity at 40°C	ASTM D7279	cSt	46.3	46.2	46.1	46.3	45.6	47.0
Viscosity at 100°C	ASTM D7279	cSt	7.2	7.2	7.1	7.2	7.0	7.1
Viscosity-index	ASTM D2270		116	116	113	116	111	110
Fuel dilution	ASTM D7593	%						
AN	ASTM D8045	mg KOH/g	0.18	0.17	0.16	0.15	0.16	0.14
BN	ASTM D2896B	mg KOH/g						
Oxidation	ASTM E2412 (A)	Abs/0.1mm	2.4	2.3	2.3	2.4	2.3	2.3
Nitration	ASTM E2412	Abs/0.1mm	2.6	2.7	2.7	2.7	2.7	2.7
PMCC	ASTM D93	°C						
COC	ASTM D92B	°C						
Color	ASTM D1500		1.5	1.5	1.0	1.5	1.5	1.5

Additives:

Ba: Barium	ASTM D5185	ppm	1	< 1	1	1	2	< 1
Ca: Calcium	ASTM D5185 (A)	ppm	44	48	41	43	45	46
Mg: Magnesium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
P: Phosphorus	ASTM D5185 (A)	ppm	69	82	72	70	71	77
S: Sulfur	ASTM D5185	%	0.54	0.61	0.52	0.55	0.57	0.64
Zn: Zink	ASTM D5185 (A)	ppm	16	18	16	17	18	18

Pollution:

Si: Silicium	ASTM D5185 (A)	ppm	< 10	< 10	< 10	< 10	< 10	< 10
B: Boron	ASTM D5185	ppm	2	3	2	< 1	7	< 1
Na: Sodium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Water	WI-0002	%						
Water (KF)	ASTM D6304C	ppm	44	21	33	38	28	60
Soot content	ASTM E2412 (A)	%						
Antifreeze	ASTM D2982A							
PC ISO grade	ASTM D7647 (A)		19/16/11	20/17/12	19/16/12	19/17/11	19/16/11	20/17/11
PC Cleanliness class	ASTM D7647 (A)		10 A	11 A	9 A	10 A	9 A	10 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. (k) Received info from customer.

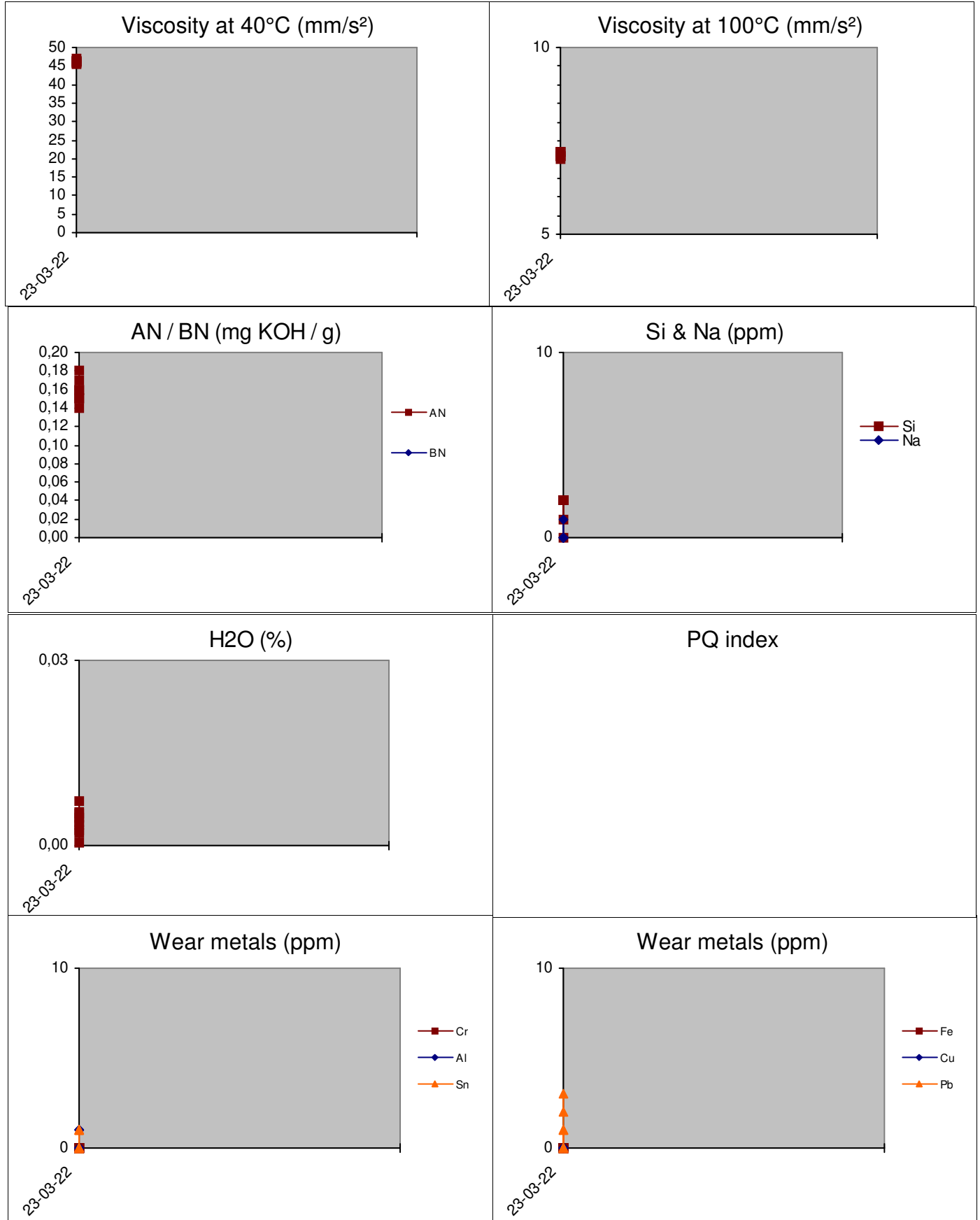
Batch: 2332401 - p.1 / 3

Diagnosis: ANW

Date of issue: 19/11/2023

B-20 ALPHA MAINTENANCE SYST..

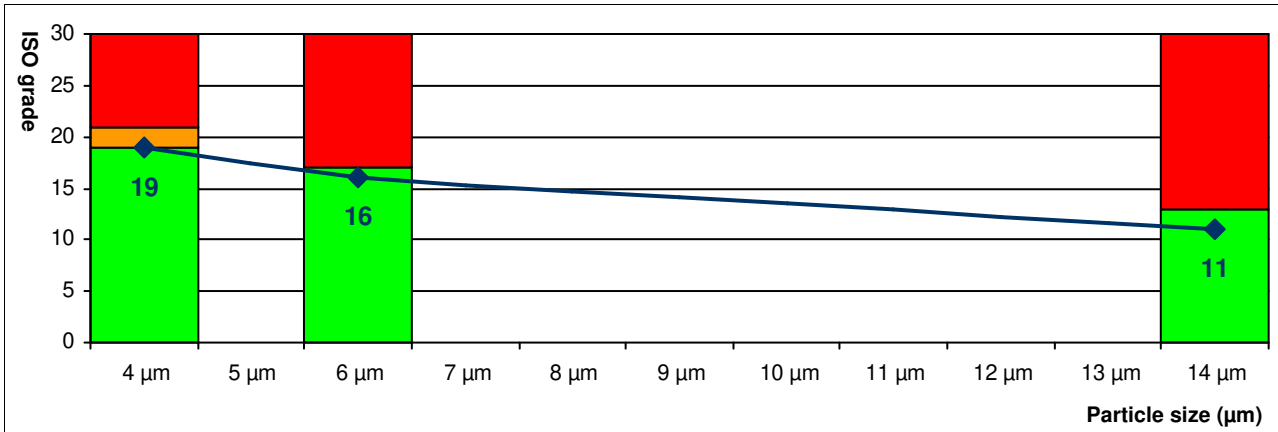
History 16.11.23 L003



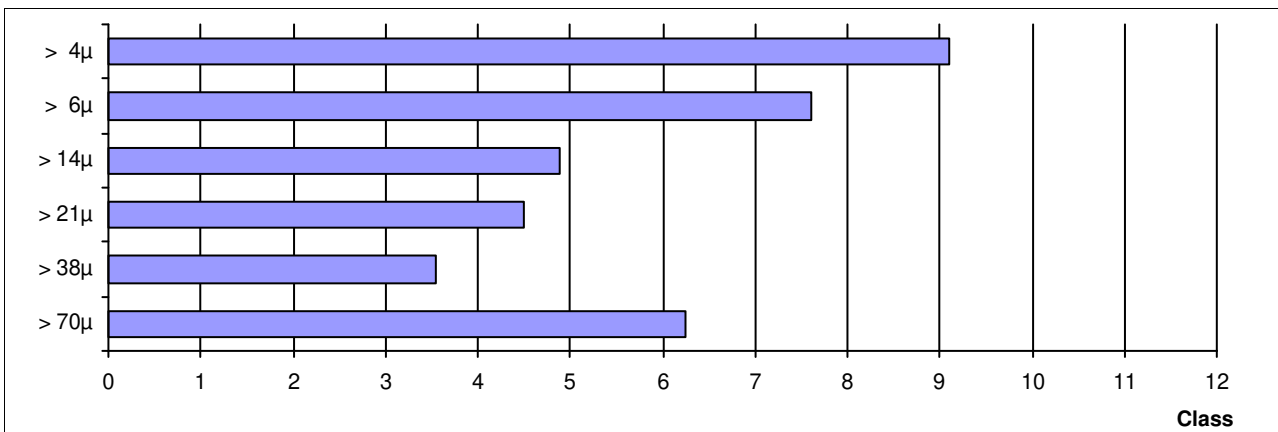
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ISO score (A)	19 / 16 / 11
AS4059 class (A)	10 A

ISO score (A) (4406:2021)	Particles / 100ml	Score
> 4µ (A)	440420	19
> 6µ (A)	62370	16
> 14µ (A)	1630	11
> 21µ (A)	230	
> 38µ (A)	20	
> 70µ (A)	20	



AS4059 class (A)	Particles / 100ml	Class
A: > 4µ (A)	440420	A10
B: > 6µ (A)	62370	B8
C: > 14µ (A)	1630	C5
D: > 21µ (A)	230	D5
E: > 38µ (A)	20	E4
F: > 70µ (A)	20	F7



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