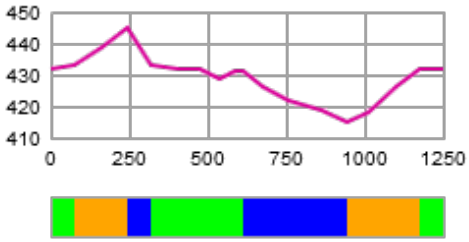
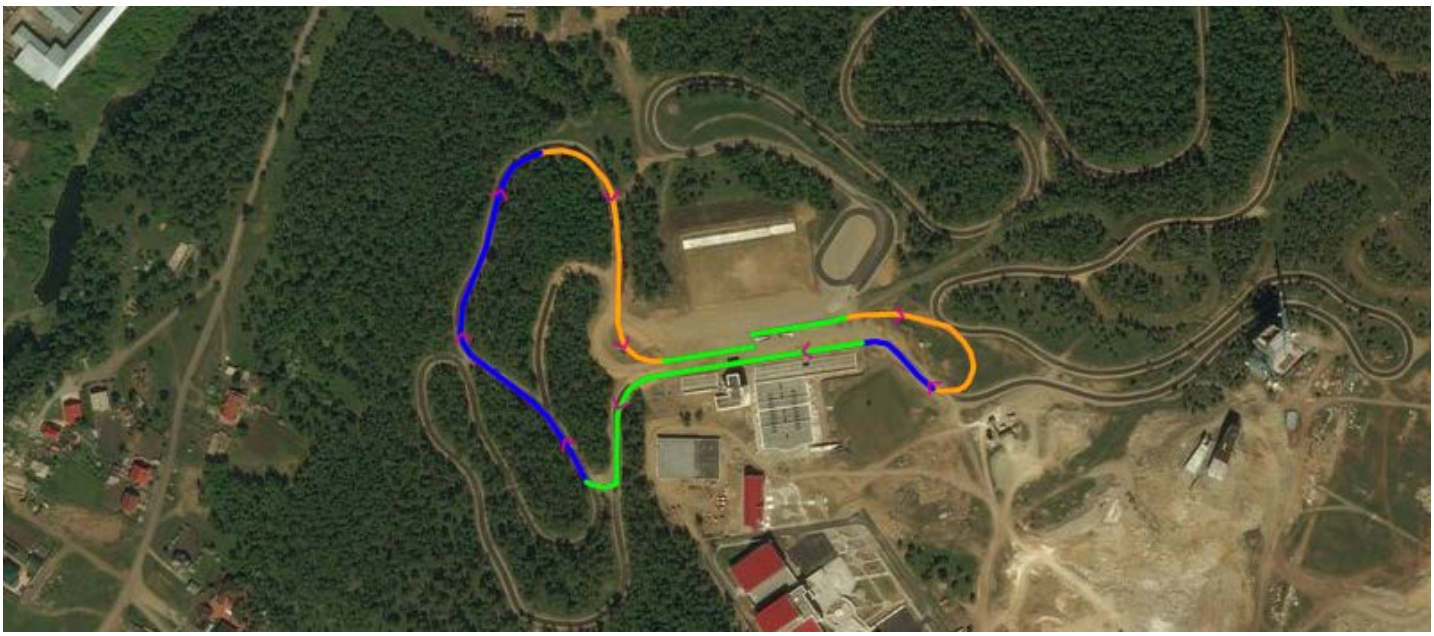
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.01/1.25
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	1,2 Sprint F/C
(9) Competition level for course	COC

Course length:	1,247m	Height difference (HD):	30m	Lowest point:	415m
Course category:	D	Maximum climb (MC):	17m	Highest point:	445m
		Total climb (TC):	32m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
Blochstrasse 2 / Postfach
CH - 3653 Oberhofen

FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- shorter climbs	2	29	90.6
- descents	2	0	0.0
- undulated terrain	3	3	9.4

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats		yes			
Course suitable for following competition formats with					
a) Classsical technique		yes			
b) Free technique		yes			
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves.

Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/8/27

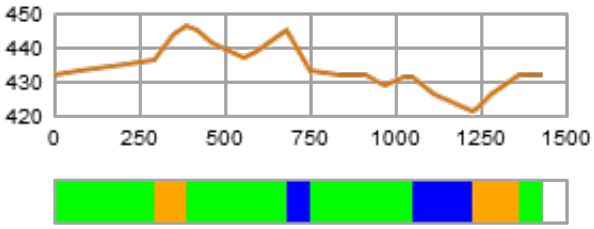
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	total			0			0.0%	part of TC
B-climb	total			29			90.6%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			3			9.4%	part of TC
	total climb			32				

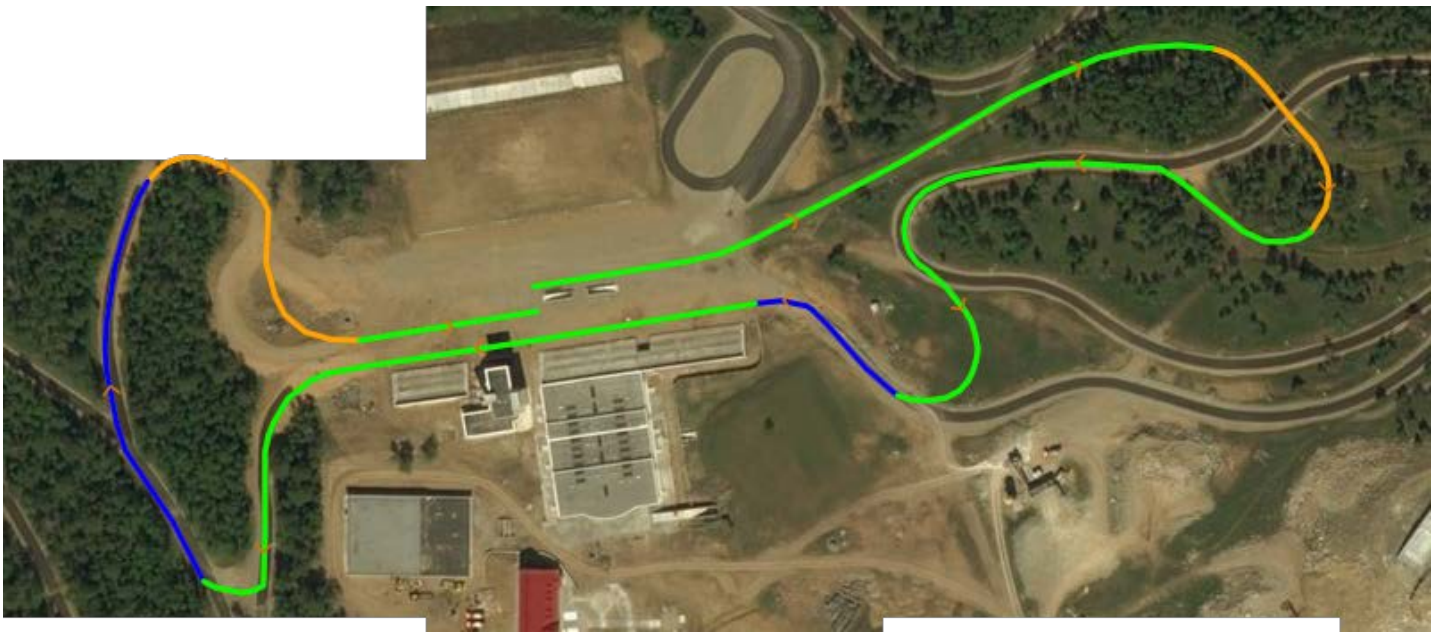
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.02/1.4
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	1,4 Sprint F
(9) Competition level for course	COC

Course length:	1,433m	Height difference (HD):	25m	Lowest point:	421m
Course category:	D	Maximum climb (MC):	11m	Highest point:	446m
		Total climb (TC):	35m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

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FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- shorter climbs	2	21	60.0
- descents	2	0	0.0
- undulated terrain	6	14	40.0

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats		yes			
Course suitable for following competition formats with					
a) Classsical technique		yes			
b) Free technique		yes			
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/8/27

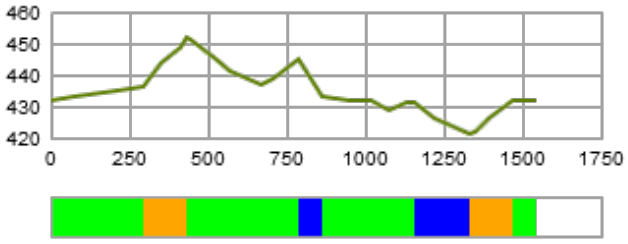
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	total			0			0.0%	part of TC
B-climb	1	295	10	10	4.6 - 15.2	10.4		
	2	1,223	11	11	5.7 - 9.2	8.0		
	total			21			60.0%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			14			40.0%	part of TC
	total climb			35				

CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.03/1.5
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	1,5 Sprint F/C
(9) Competition level for course	COC

Course length:	1,541m	Height difference (HD):	31m	Lowest point:	421m
Course category:	D	Maximum climb (MC):	16m	Highest point:	452m
		Total climb (TC):	41m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

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FIS International Ski Federation
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Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- shorter climbs	2	27	65.9
- descents	2	0	0.0
- undulated terrain	4	14	34.1

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats		yes			
Course suitable for following competition formats with					
a) Classsical technique		yes			
b) Free technique		yes			
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/8/27

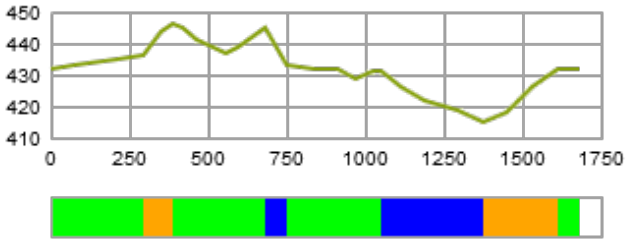
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	total			0			0.0%	part of TC
B-climb	1	295	16	16	7.8 - 16.9	11.9		
	2	1,331	11	11	5.7 - 9.2	8.0		
	total			27			65.9%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			14			34.1%	part of TC
	total climb			41				

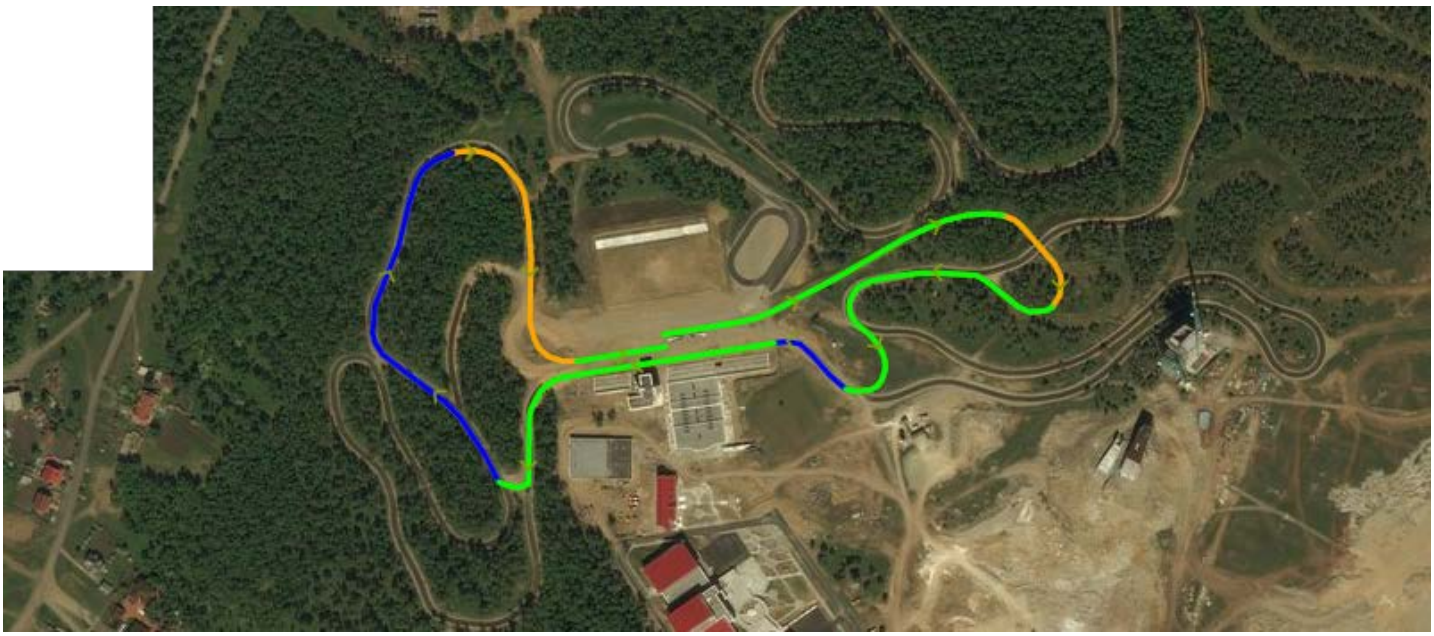
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.04/1.7
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	1,7 Sprint F/C
(9) Competition level for course	COC

Course length:	1,682m	Height difference (HD):	31m	Lowest point:	415m
Course category:	D	Maximum climb (MC):	17m	Highest point:	446m
		Total climb (TC):	41m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

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FIS International Ski Federation
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CH - 3653 Oberhofen

FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- shorter climbs	2	27	65.9
- descents	2	0	0.0
- undulated terrain	4	14	34.1

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats		yes			
Course suitable for following competition formats with					
a) Classsical technique		yes			
b) Free technique		yes			
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/8/27

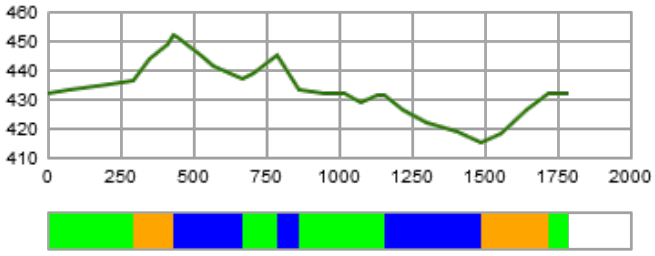
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	total			0			0.0%	part of TC
B-climb	1	295	10	10	4.6 - 15.2	10.4		
	2	1,376	17	17	4.1 - 9.6	7.3		
	total			27			65.9%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			14			34.1%	part of TC
	total climb			41				

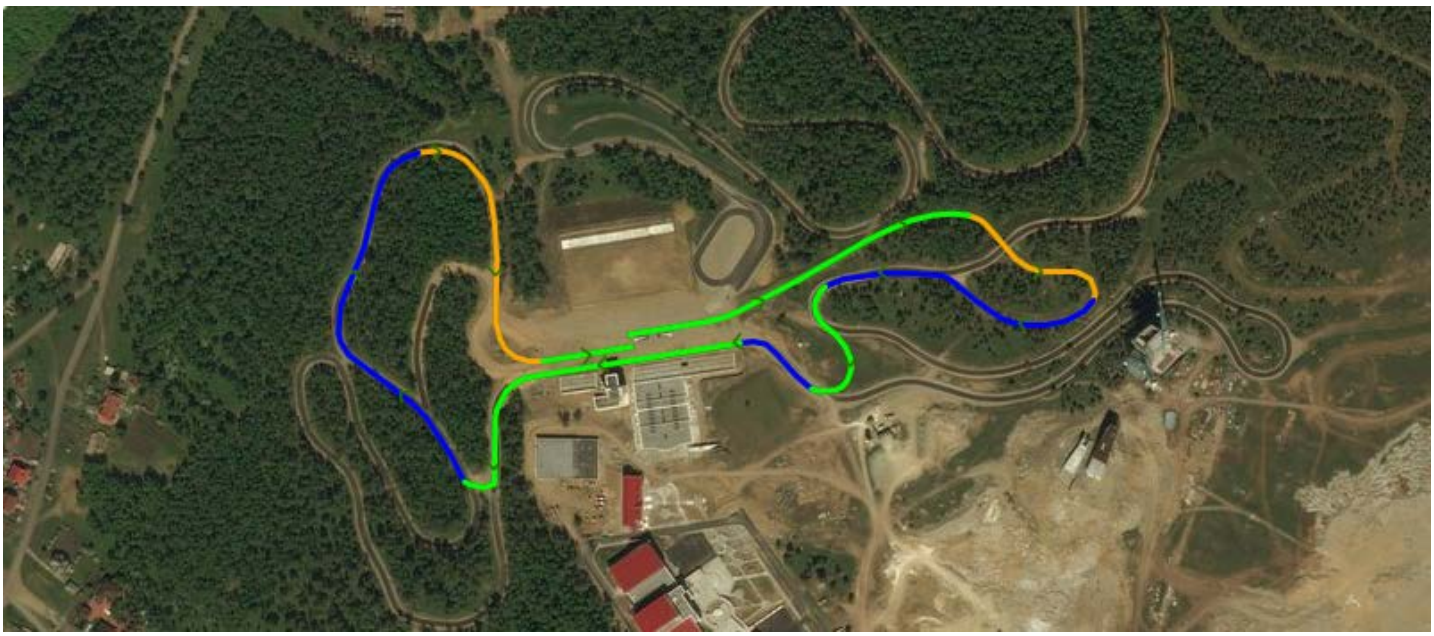
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.05/1.8
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	1,8 Sprint F/C
(9) Competition level for course	COC

Course length:	1,790m	Height difference (HD):	37m	Lowest point:	415m
Course category:	D	Maximum climb (MC):	17m	Highest point:	452m
		Total climb (TC):	47m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
Blochstrasse 2 / Postfach
CH - 3653 Oberhofen

FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- shorter climbs	2	33	70.2
- descents	3	0	0.0
- undulated terrain	5	14	29.8

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats		yes			
Course suitable for following competition formats with					
a) Classsical technique		yes			
b) Free technique		yes			
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/8/27

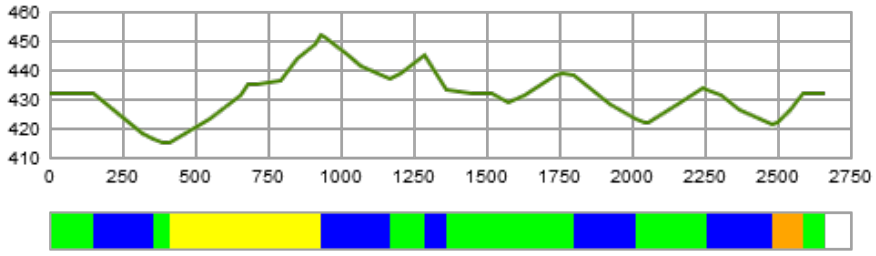
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	total			0			0.0%	part of TC
B-climb	1	295	16	16	7.8 - 16.9	11.9		
	2	1,485	17	17	4.1 - 9.6	7.3		
	total			33			70.2%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			14			29.8%	part of TC
	total climb			47				

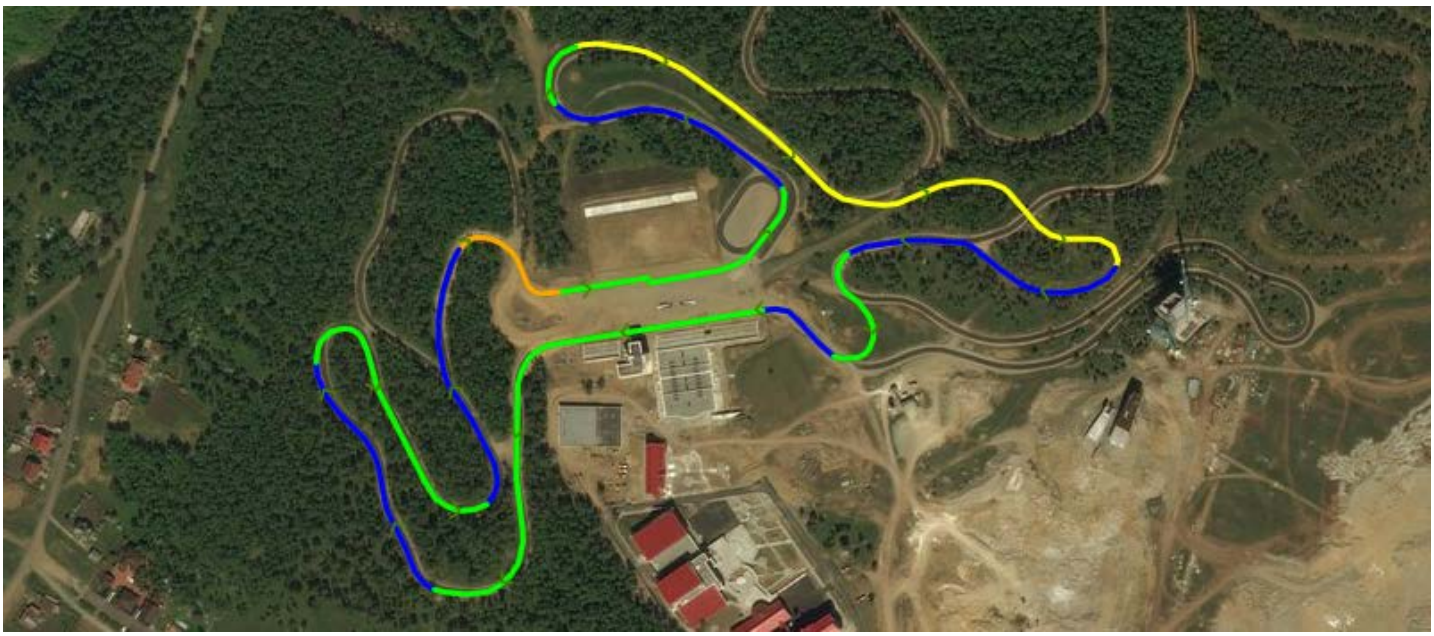
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.06/2.5
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	2,5 red
(9) Competition level for course	COC

Course length:	2,660m	Height difference (HD):	37m	Lowest point:	415m
Course category:	D	Maximum climb (MC):	37m	Highest point:	452m
		Total climb (TC):	78m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

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FIS International Ski Federation
Blochstrasse 2 / Postfach
CH - 3653 Oberhofen

FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	1	37	47.4
- shorter climbs	1	11	14.1
- descents	5	0	0.0
- undulated terrain	6	30	38.5

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)			yes		

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/8/27

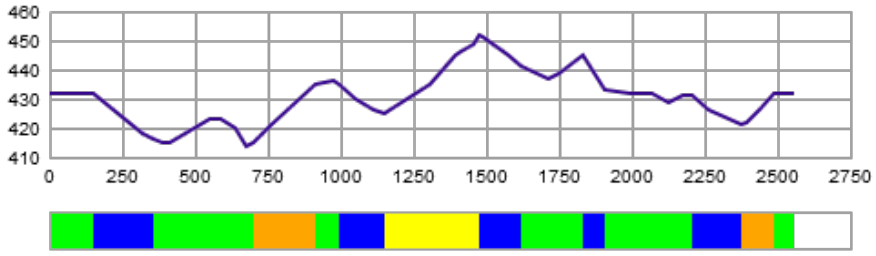
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	415	37	37	1.3 - 16.9	7.2		
	total			37			47.4%	part of TC
B-climb	1	2,480	11	11	5.7 - 12.3	10.0		
	total			11			14.1%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			30			38.5%	part of TC
	total climb			78				

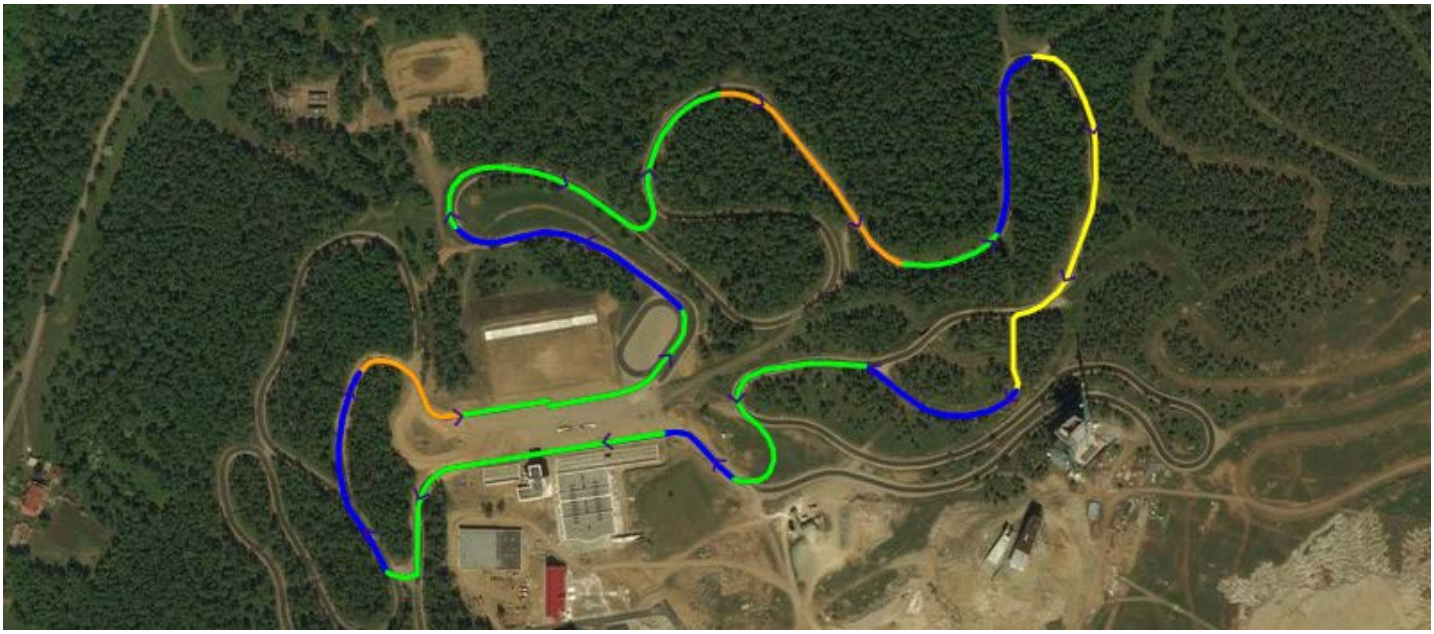
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.07/2.5
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	2,5 without bridge
(9) Competition level for course	COC

Course length:	2,557m	Height difference (HD):	38m	Lowest point:	414m
Course category:	D	Maximum climb (MC):	27m	Highest point:	452m
		Total climb (TC):	78m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
Blochstrasse 2 / Postfach
CH - 3653 Oberhofen

FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	1	27	34.6
- shorter climbs	2	31	39.7
- descents	5	0	0.0
- undulated terrain	7	20	25.6

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)			yes		

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

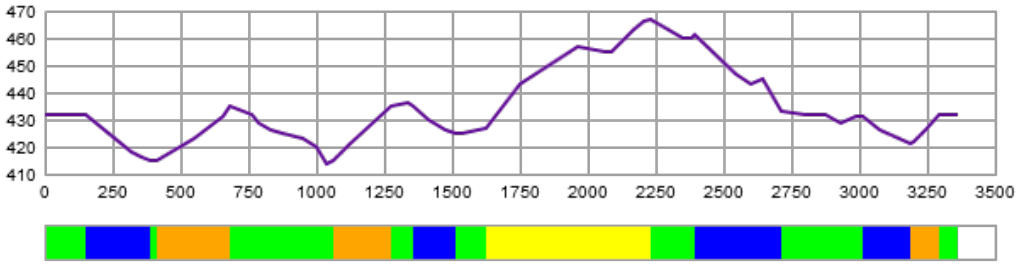
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	1,150	27	27	4.7 - 16.9	8.3		
	total			27			34.6%	part of TC
B-climb	total			31			39.7%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			20			25.6%	part of TC
	total climb			78				

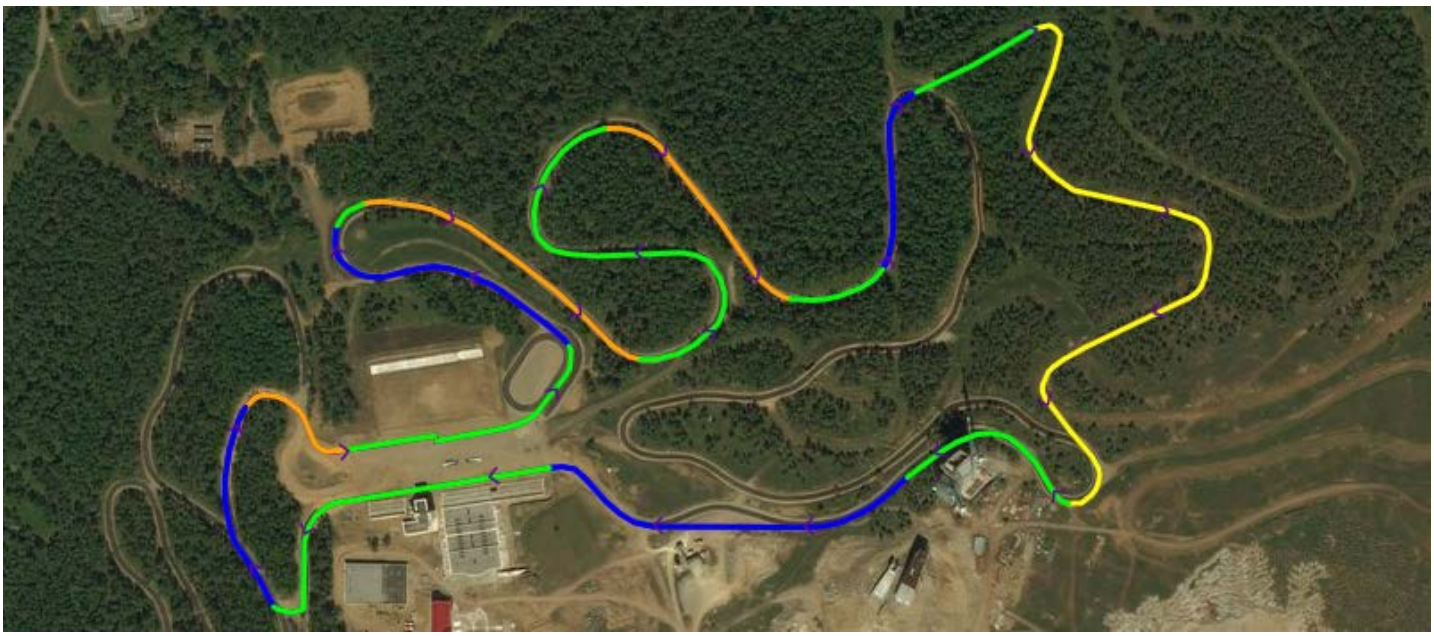
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.08/3.3
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	3,3 red
(9) Competition level for course	COC

Course length:	3,365m	Height difference (HD):	53m	Lowest point:	414m
Course category:	D	Maximum climb (MC):	40m	Highest point:	467m
		Total climb (TC):	102m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

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FIS International Ski Federation
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FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	1	42	41.2
- shorter climbs	3	51	50.0
- descents	4	2	2.0
- undulated terrain	10	7	6.9

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	no

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)			yes		

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

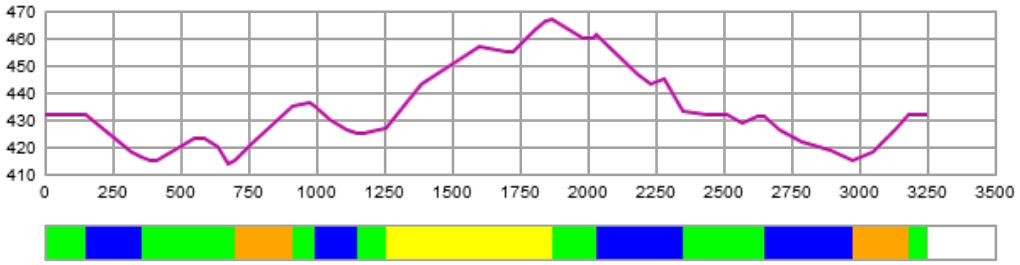
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	1,622	40	42	-2.0 - 12.5	6.6		
	total			42			41.2%	part of TC
B-climb	1	415	20	20	5.8 - 16.1	7.5		
	2	1,064	20	20	9.2 - 10.0	9.4		
	3	3,185	11	11	5.7 - 12.3	10.0		
	total			51			50.0%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			7			6.9%	part of TC
	total climb			102				

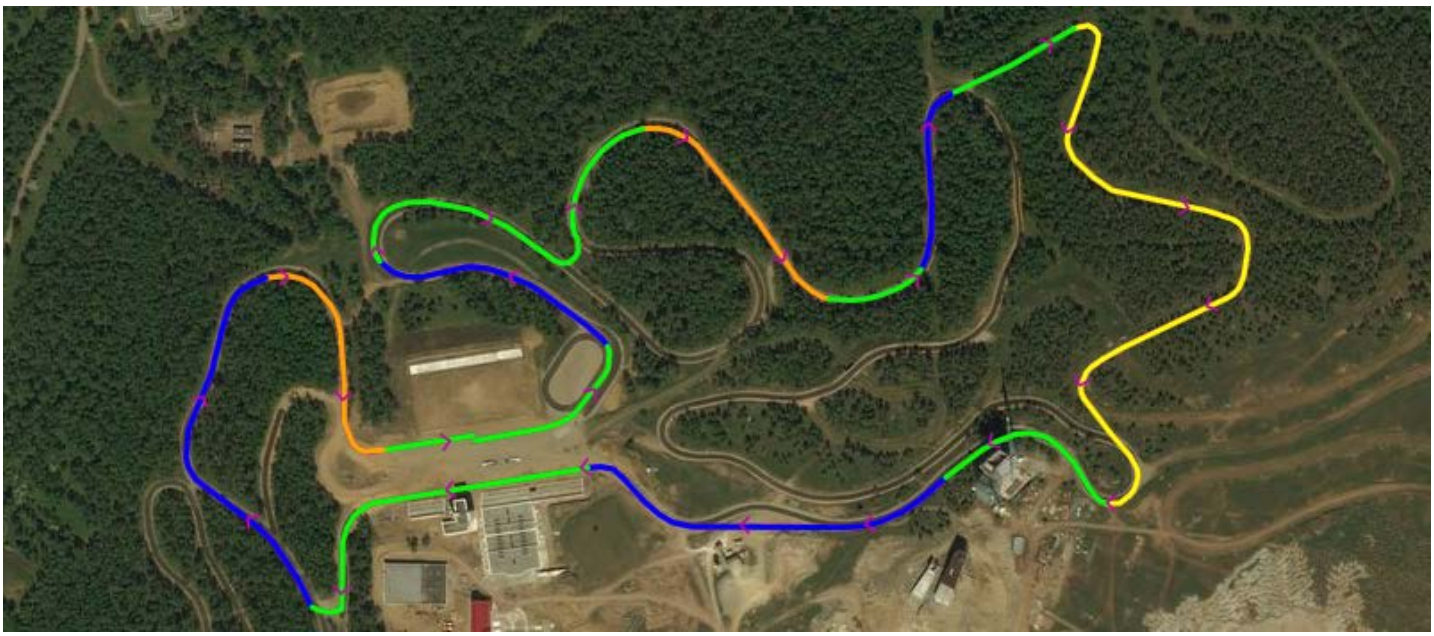
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.09/3.3
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	3,3 skiathlon
(9) Competition level for course	COC

Course length:	3,251m	Height difference (HD):	53m	Lowest point:	414m
Course category:	E	Maximum climb (MC):	40m	Highest point:	467m
		Total climb (TC):	96m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

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FIS International Ski Federation
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FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	1	42	43.8
- shorter climbs	2	37	38.5
- descents	4	2	2.1
- undulated terrain	9	15	15.6

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course			yes		
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/8/27

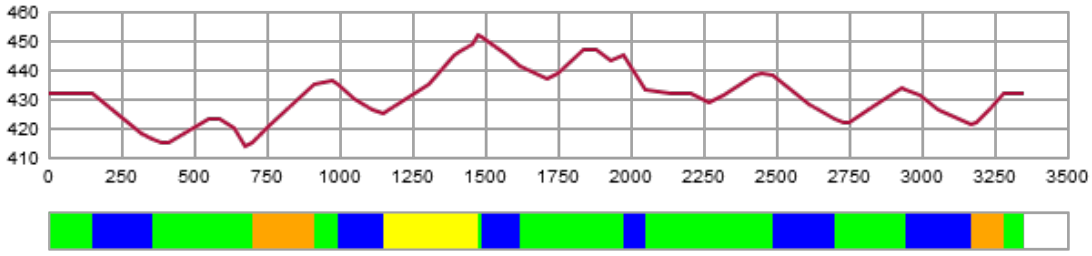
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	1,259	40	42	-2.0 - 12.5	6.6		
	total			42			43.8%	part of TC
B-climb	1	701	20	20	9.2 - 10.0	9.4		
	2	2,975	17	17	4.1 - 12.3	8.3		
	total			37			38.5%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			15			15.6%	part of TC
	total climb			96				

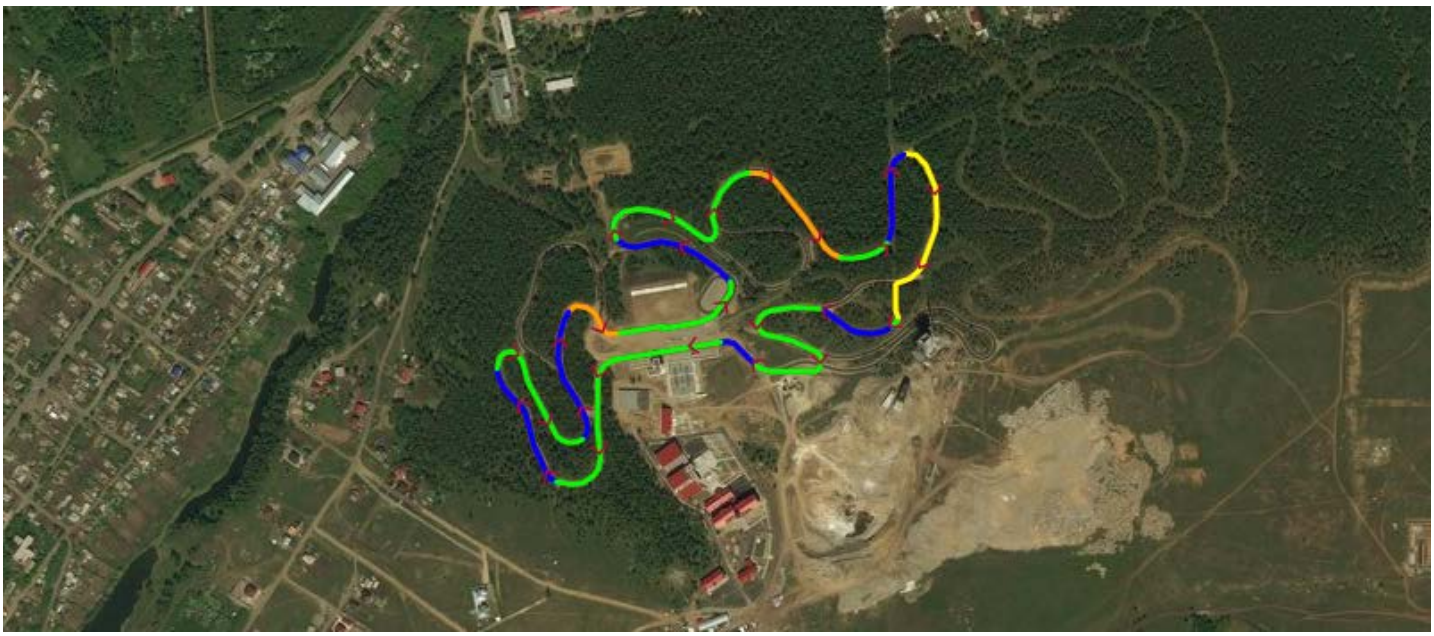
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.10/3.3
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	3,3 without bridge
(9) Competition level for course	COC

Course length:	3,348m	Height difference (HD):	38m	Lowest point:	414m
Course category:	D	Maximum climb (MC):	27m	Highest point:	452m
		Total climb (TC):	102m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

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FIS International Ski Federation
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FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	1	27	26.5
- shorter climbs	2	31	30.4
- descents	6	0	0.0
- undulated terrain	10	44	43.1

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)			yes		

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

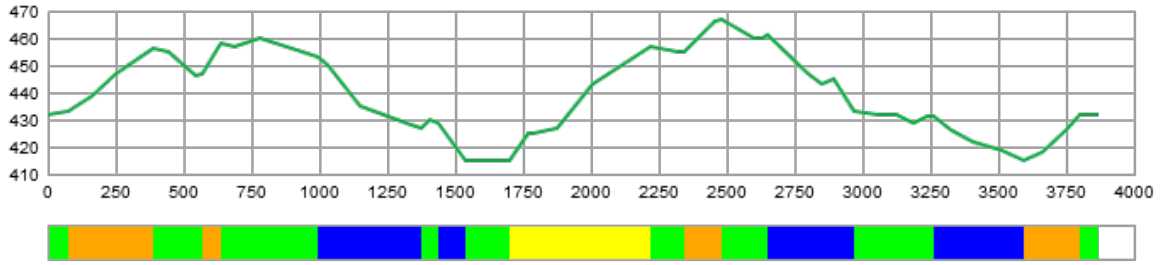
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	1,150	27	27	4.7 - 16.9	8.3		
	total			27			26.5%	part of TC
B-climb	1	701	20	20	9.2 - 10.0	9.4		
	2	3,168	11	11	5.7 - 12.3	10.0		
	total			31			30.4%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			44			43.1%	part of TC
	total climb			102				

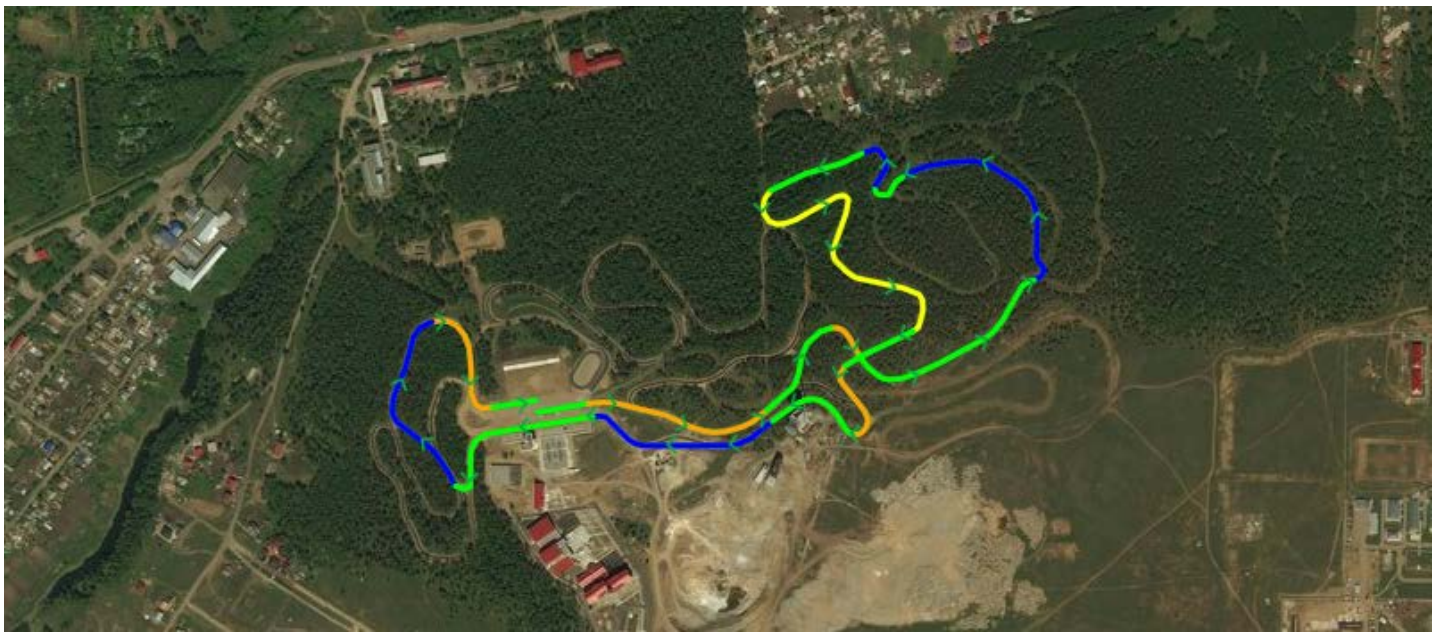
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.11/3.75
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	3,75 blue
(9) Competition level for course	COC

Course length:	3,868m	Height difference (HD):	52m	Lowest point:	415m
Course category:	D	Maximum climb (MC):	42m	Highest point:	467m
		Total climb (TC):	118m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

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FIS International Ski Federation
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FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	1	42	35.6
- shorter climbs	4	63	53.4
- descents	4	2	1.7
- undulated terrain	10	11	9.3

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)			yes		

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

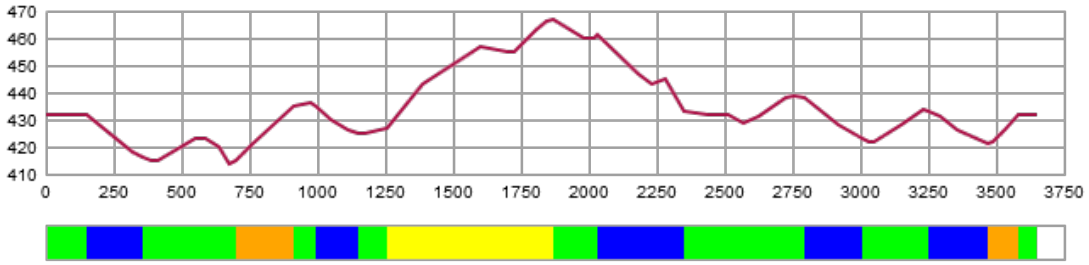
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	1,699	42	42	2.3 - 14.2	8.1		
	total			42			35.6%	part of TC
B-climb	1	77	23	23	6.6 - 8.9	7.4		
	2	566	11	11	14.7 - 23.1	15.7		
	3	2,341	12	12	3.8 - 10.4	8.4		
	4	3,592	17	17	4.1 - 12.3	8.3		
	total			63			53.4%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			11			9.3%	part of TC
	total climb			118				

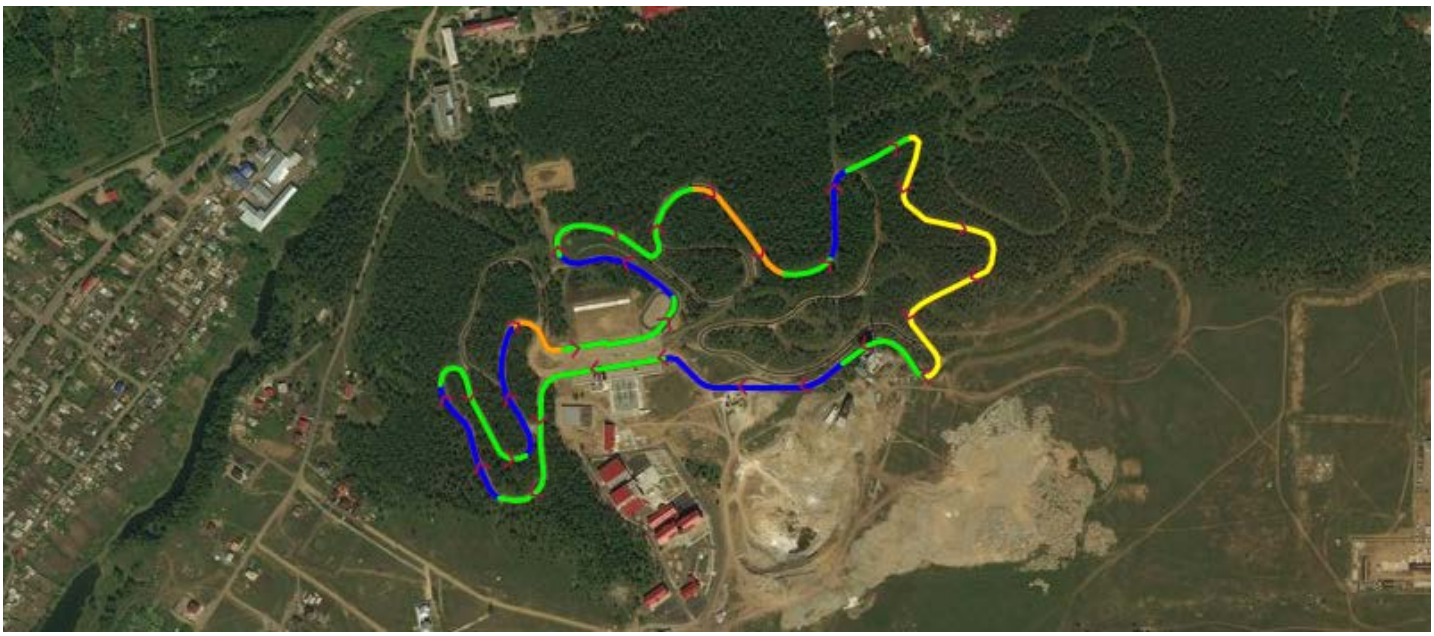
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.12/3.75
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	3,75 skiathlon
(9) Competition level for course	COC

Course length:	3,650m	Height difference (HD):	53m	Lowest point:	414m
Course category:	E	Maximum climb (MC):	40m	Highest point:	467m
		Total climb (TC):	110m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
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FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	1	42	38.2
- shorter climbs	2	31	28.2
- descents	5	2	1.8
- undulated terrain	10	35	31.8

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course			yes		
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

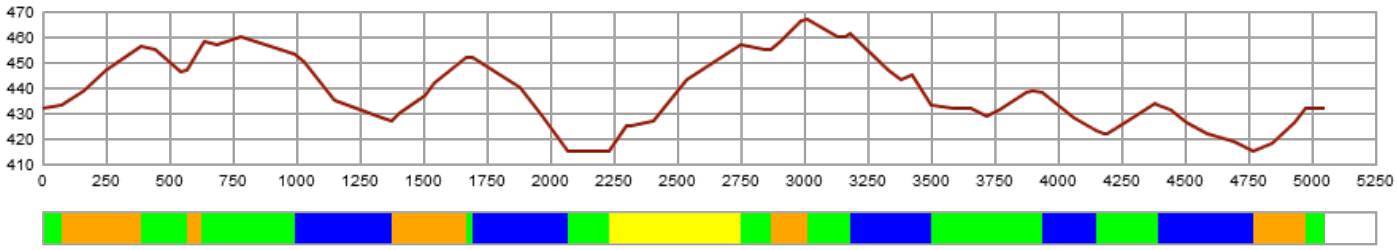
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	1,259	40	42	-2.0 - 12.5	6.6		
	total			42			38.2%	part of TC
B-climb	1	701	20	20	9.2 - 10.0	9.4		
	2	3,470	11	11	5.7 - 12.3	10.0		
	total			31			28.2%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			35			31.8%	part of TC
	total climb			110				

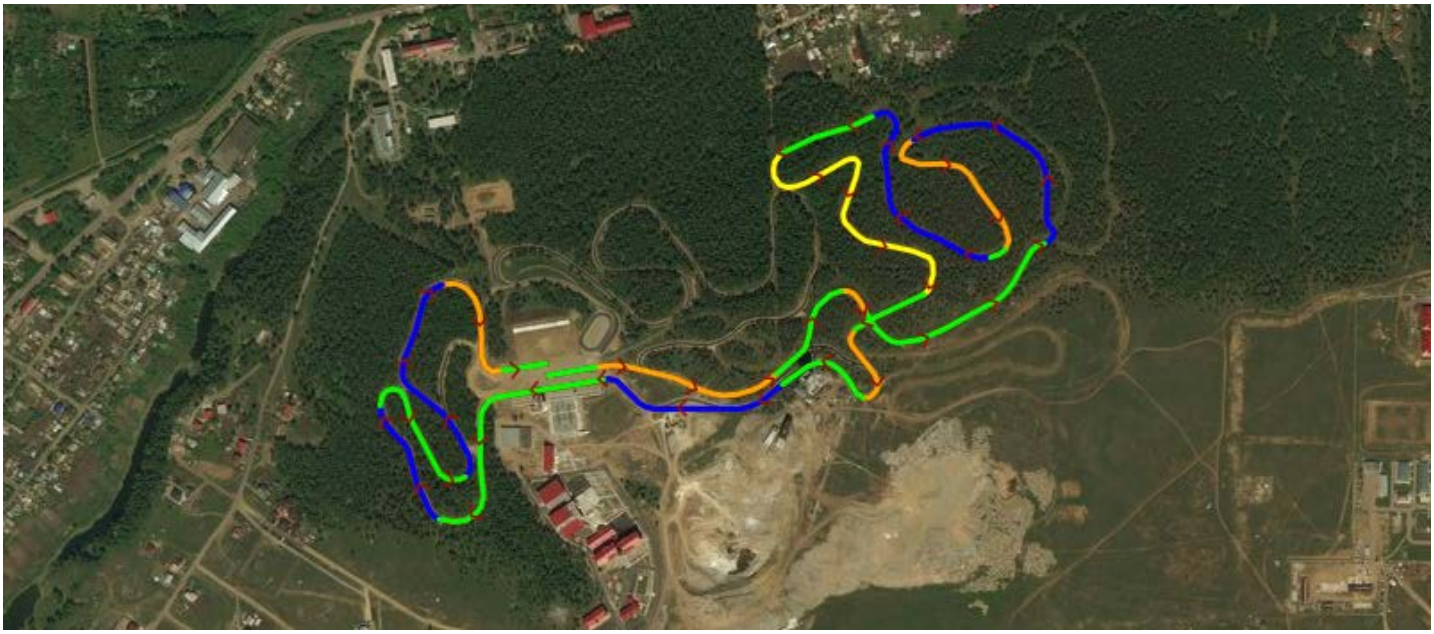
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.14/5.0
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	5
(9) Competition level for course	COC

Course length:	5,047m	Height difference (HD):	52m	Lowest point:	415m
Course category:	D	Maximum climb (MC):	42m	Highest point:	467m
		Total climb (TC):	160m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
Blochstrasse 2 / Postfach
CH - 3653 Oberhofen

FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	1	42	26.3
- shorter climbs	5	86	53.8
- descents	5	2	1.3
- undulated terrain	10	30	18.8

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)			yes		

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

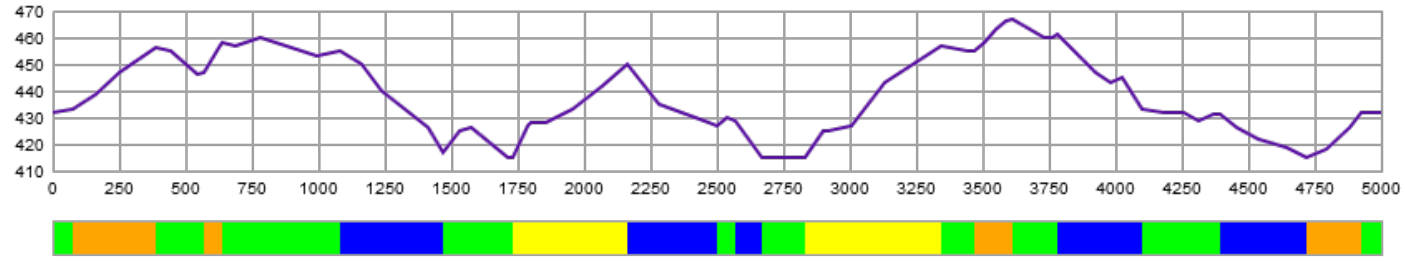
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	2,230	42	42	2.3 - 14.2	8.1		
	total			42			26.3%	part of TC
B-climb	1	77	23	23	6.6 - 8.9	7.4		
	2	566	9	9	14.7 - 14.7	14.8		
	3	1,373	25	25	7.0 - 12.8	8.4		
	4	2,872	12	12	3.8 - 10.4	8.4		
	5	4,771	17	17	4.1 - 12.3	8.3		
	total			86			53.8%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			30			18.8%	part of TC
	total climb			160				

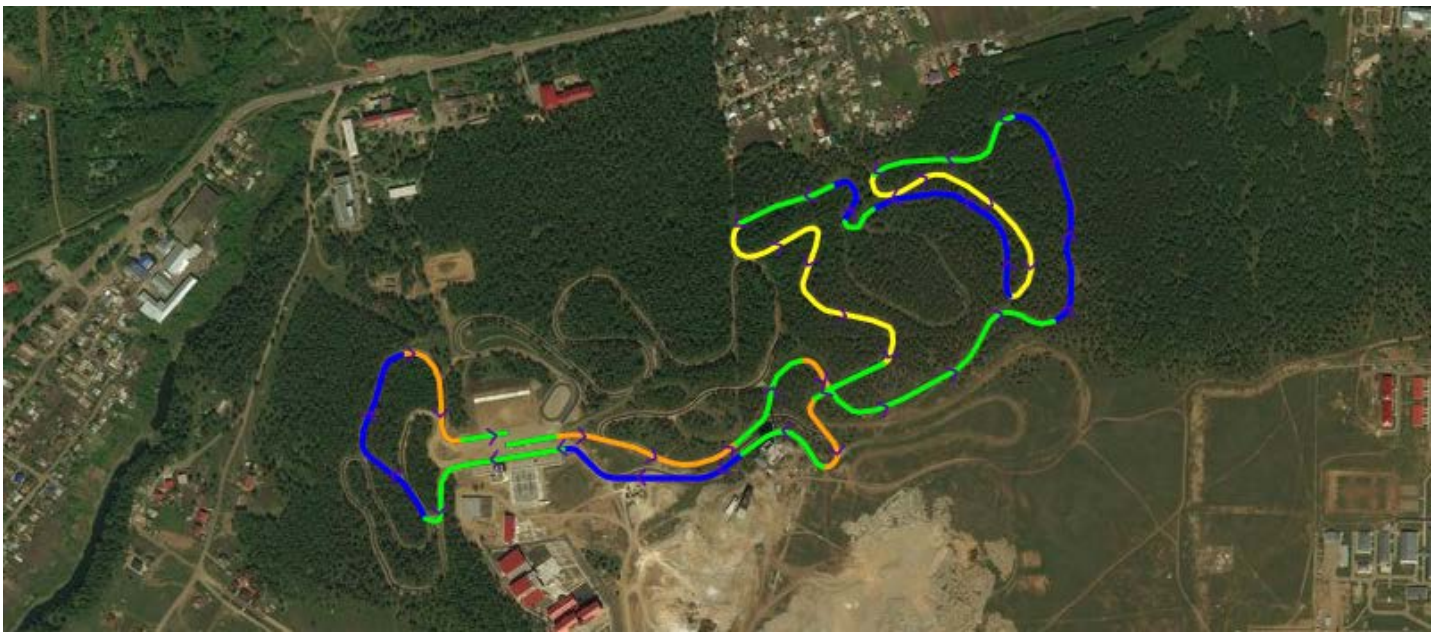
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.13/5.0
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	5 far
(9) Competition level for course	COC

Course length:	4,997m	Height difference (HD):	52m	Lowest point:	415m
Course category:	D	Maximum climb (MC):	42m	Highest point:	467m
		Total climb (TC):	164m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
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FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	2	77	47.0
- shorter climbs	4	63	38.4
- descents	5	2	1.2
- undulated terrain	10	22	13.4

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)			yes		

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

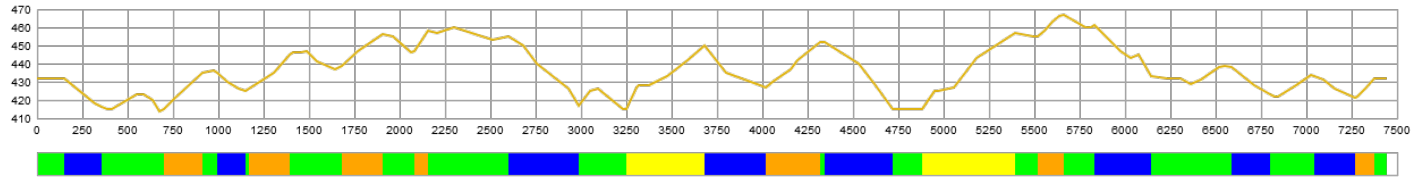
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	1,733	35	35	5.0 - 22.0	8.1		
	2	2,829	42	42	2.3 - 14.2	8.1		
	total			77			47.0%	part of TC
B-climb	1	77	23	23	6.6 - 8.9	7.4		
	2	566	11	11	14.7 - 23.1	15.7		
	3	3,470	12	12	3.8 - 10.4	8.4		
	4	4,721	17	17	4.1 - 12.3	8.3		
	total			63			38.4%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			22			13.4%	part of TC
	total climb			164				

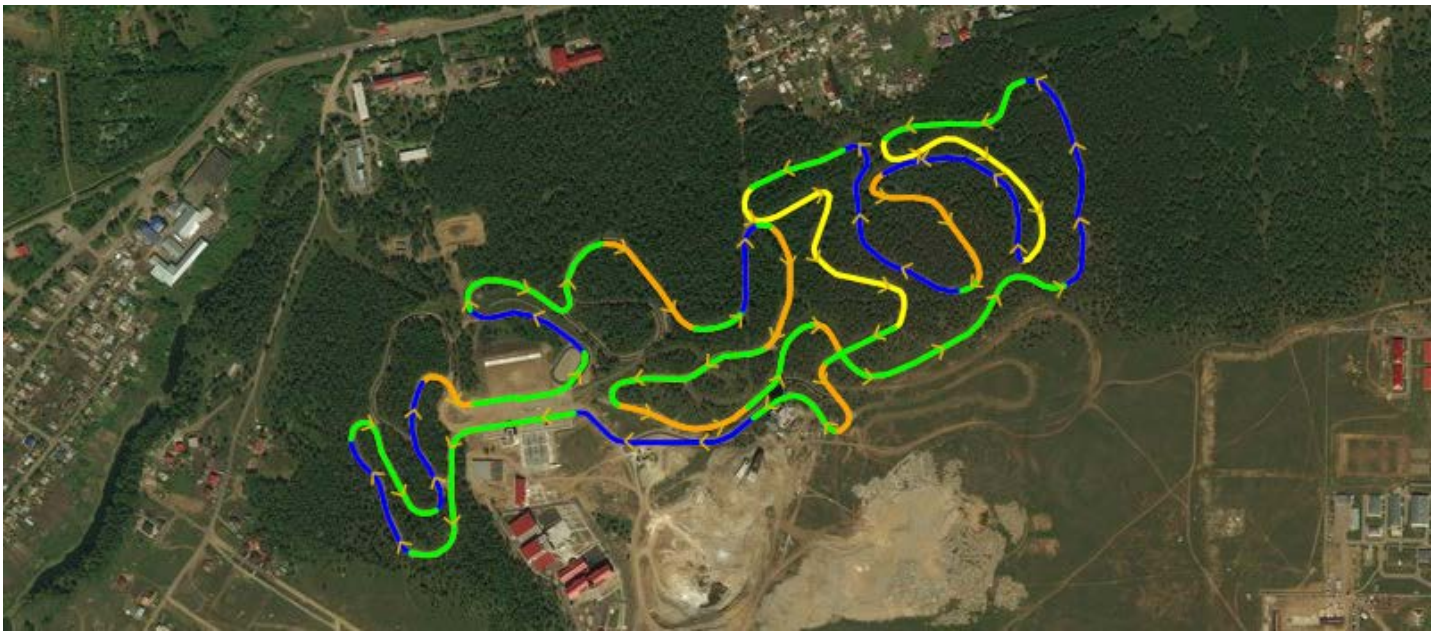
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.15/7.5
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	7,5
(9) Competition level for course	COC

Course length:	7,446m	Height difference (HD):	53m	Lowest point:	414m
Course category:	D	Maximum climb (MC):	42m	Highest point:	467m
		Total climb (TC):	247m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
Blochstrasse 2 / Postfach
CH - 3653 Oberhofen

FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	2	77	31.2
- shorter climbs	7	115	46.6
- descents	8	2	0.8
- undulated terrain	17	53	21.5

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes		yes	yes	yes
Course suitable for following competition formats with					
a) Classsical technique	yes		yes	yes	yes
b) Free technique	yes		yes	yes	yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)			yes		

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

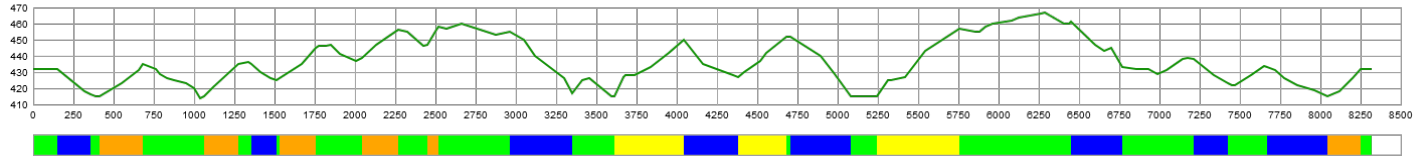
(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	3,251	35	35	5.0 - 22.0	8.1		
	2	4,878	42	42	2.3 - 14.2	8.1		
	total			77			31.2%	part of TC
B-climb	1	701	20	20	9.2 - 10.0	9.4		
	2	1,170	19	19	6.5 - 12.1	8.6		
	3	1,680	17	17	6.6 - 8.9	7.5		
	4	2,084	11	11	14.7 - 23.1	15.7		
	5	4,021	25	25	7.0 - 12.8	8.4		
	6	5,520	12	12	3.8 - 10.4	8.4		
	7	7,266	11	11	5.7 - 12.3	10.0		
	total			115			46.6%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			53			21.5%	part of TC
	total climb			247				

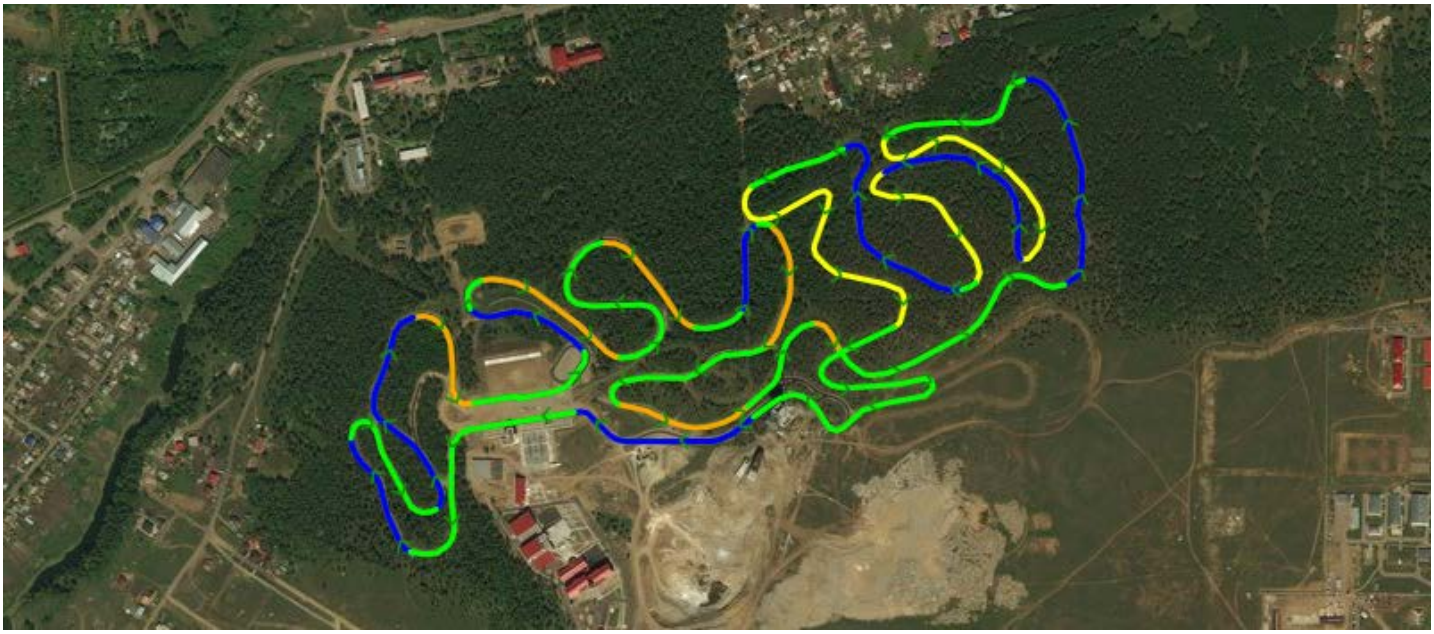
CERTIFICATE
OF FIS HOMOLOGATED CROSS-COUNTRY COURSE
FIS CROSS-COUNTRY COMMITTEE

(1) Registration number:	22/25.16/8.3
(2) Name of the competition site:	National ski center
(3) Name of city/region:	Schuchinsk
(4) Organizer:	Cross-country Skiing Federation of Kazakhstan
(5) National ski association:	KAZ
(6) Contact person in the organizing committee:	Oleg Kolomeyets
(7) Homologation inspector:	Andrey Arsenyev
(8) Name of course:	8,3
(9) Competition level for course	COC

Course length:	8,319m	Height difference (HD):	53m	Lowest point:	414m
Course category:	D	Maximum climb (MC):	42m	Highest point:	467m
		Total climb (TC):	265m		



A-climb B-climb C-climb descent undulated terrain



FIS Office

Mignerey, Pierre
FIS International Ski Federation
Blochstrasse 2 / Postfach
CH - 3653 Oberhofen

FIS Stamp

FIS Homologation Responsible

Vodrazka, Jakub

Date of Issue
23.05.2022
Valid until
30.06.2027

(10) Overview of the uphills:

	No.	PTC	% of TC
- major climbs	3	102	38.5
- shorter climbs	6	104	39.2
- descents	8	2	0.8
- undulated terrain	15	57	21.5

(11) Stadium area:

Fixed stadium area	yes
Fixed building	yes
Temporary stadium	no
Temporary building	no
Good infrastructure (access, parking, media, etc.)	yes
Skitesting area along course/near stadium	yes
Warm up track near the stadium	yes

Indoor working room:

Timekeeping	yes
Announcer	yes
Jury	yes
Race office	yes

(12) Category for the stadium and course layout:

	Interval	Sprint	Skiathlon	Relay	Mass start
Stadium suitable for following competition formats	yes				yes
Course suitable for following competition formats with					
a) Classsical technique	yes				yes
b) Free technique	yes				yes
Course suitable for relay and skiathlon competition					
a) On same course					
b) Combined on different courses (C+D or D+D)					

(13) Possibility of snow making:

Snow making is possible

(14) Map Material:

World Imagery

(15) Source of accurate elevation data:

Initially all courses were measured by laser distance measumeter and inclinometer. Course profiles based on these mearures were the source of course elevation data. Next these data were rounded and checked to avoid unexpected results caused by rounding.

(16) Safety considerations:

All downhills are wide enough and good visible. Downhill curves have proper banking. There are no any obctacles such as trees, stones, stubs and light poles outside curves. Bridges and other dangerous places are properly fenced.

(17) General remarks:

All courses pass through the stadium 0.7-1.1 km before finish. It takes some stadium area but great for spectators. Besides all courses have good uphill right before the entry into finish zone. Stadium level is about middle of course high differences.

(18) Date of first inspection: 2017/5/14

(19) Date of final inspection: 2017/5/14

(20) Summary of terrain characteristics

	#	at m	PHD (m)	PTC (m)	grad. (%)	avg. grad.(%)		
A-climb	1	3,614	35	35	5.0 - 22.0	8.1		
	2	4,384	25	25	7.0 - 12.8	8.4		
	3	5,241	42	42	2.3 - 14.2	8.1		
	total			102			38.5%	part of TC
B-climb	1	415	20	20	5.8 - 16.1	7.5		
	2	1,064	20	20	9.2 - 10.0	9.4		
	3	1,533	19	19	6.5 - 12.1	8.6		
	4	2,043	17	17	6.6 - 8.9	7.5		
	5	2,448	11	11	14.7 - 23.1	15.7		
	6	8,043	17	17	4.1 - 12.3	8.3		
	total			104			39.2%	part of TC
C-climb	total			0			0.0%	part of TC
undulated terrain	total			57			21.5%	part of TC
	total climb			265				