AKHASHENI

REGISTRATION № 4

DATE OF REGISTRATION: 2005 30 08

APPELLATION OF ORIGIN: AKHASHENI

NAME OF GOOD FOR WHICH THE APPELLATION OF ORIGIN IS REQUIRED: Wine

NAME AND ADDRESS OF APPLICANT: LEPL NATIONAL WINE AGENCY, Marshal Gelovani Ave. 32, 0159, Tbilisi, Georgia (GE)

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1. APPELLATION OF ORIGIN: AKHASHENI

2. PRODUCT DESCRIPTION

2.1. PRODUCT CATEGORY

Wine "Akhasheni" red mi doux (semi sweet).

2.2. PRODUCT ORGANOLEPTIC CHARACTERISTICS

Wine "Akhasheni" shall satisfy the following requirements:

§ Color – dark red;

§ Aroma and taste – perfect, harmonic, velvet, refined, pleasantly sweet with fruity tones, having taste and aroma of Saperavi grapes.

2.3. PRODUCT PHYSICO-CHEMICAL CHARACTERISTICS

Wine "Akhasheni" shall satisfy the following requirements:

§ Factual volumetric spirit content – no less than 10,5 %;

§ Total volumetric spirit content – no more than 15,6 %;

§ Sugar content – no more than 18-45 g/l;

§ Titrated acidity calculated on tartar acid – no less than 5 g/l;

§ Volatile acidity calculated on acetic acid – no more than 1,2 g/l;

§ Sulfur dioxide total mass concentration – no more than 200 mg/l;

§ Concentration of sugar free extract mass – no less than 22 g/l.

3. GEOGRAPHICAL AREA AND ZONES OF PRODUCTION

The micro-zone Akhasheni is located in Inner Kakheti, in the middle stream of the River Alazani, on the coordinates – 41˚48' of Northern longitude and 45˚44' of Eastern latitude.

The micro-zone Akhasheni covers forest edge slopes continuation of Tsiv-Gombori Range to the River Alazani. It includes the part of territory of the following villages: Zegaani, Akhasheni, Chumlaki, Kitaani sowing fields, and Gurjaani region, as well.

A border of the micro-zone is continued along Chermiskhevi (Cherami Gorge) from the North, turns in the South-Eastern suburb of the village Velistsikhe towards the North-East and is continued along the road to the North-Western corner of local industry territory, wherein turns right and is continued along the road at first into the East, and then – the North-East directions to Alazani Channel. Therefrom the border is continued along the channel towards the North direction to the lakes, turns right and is continued along Rtskhiliani Gorge at first into the East, and then the North-East directions to the River Alazani. Then, the border is continued along the river towards the South-East following river stream direction to Tanana Gorge, turns into the South-West and is continued at first along Tanana Gorge, and then – the road to Alazani Cannel (Kotekhi Bridge), and then – Khao Cellar. After that, the border is continued along the highway towards the North-West direction to Vedzirula Gorge at first into the West and then – the South-West directions and arrives Gurjaani-Telavi highway. The border is continued to the South-West from the highway on Javakhishvili Street to Tsiv-Gombori Range slopes, and then – to Chermiskhevi (Cherami Gorge) towards the North-West direction.

Wine "Akhasheni" shall be prepared only with the grapes cultivated in the vineyards of the micro-zone Akhasheni.

Grape processing and winemaking takes place in the territory of the micro-zone Akhasheni, and outside of the micro-zone Akhasheni, as well, but within Kakheti viticulture area.

4. VINE VARIETIES

Wine "Akhasheni" shall be prepared with the grapes of Saperavi. Usage of other varieties is prohibited.

5. VITICULTURE PRACTICE

- **The micro-zone Akhasheni vineyards are situated on 350-700 m-s above sea level.**
- **Distance between the rows in the vineyards – 1-3 m-s;**
- **Distance between the vines in the row – 0,8-1,5 m-s;**
- **Height of stems – 60-90 cm-s;**
- **Shape of pruning – one-sided or Georgian two-sided or free.**

6. GRAPE MATURITY, VINTAGE, TRANSPORTATION

- **Wine "Akhasheni" shall be produced only with ripe grapes. Sugar content shall be no less than 22%, at the vintage.**
- **Grapes transportation is permitted only with wood or plastic boxes, with bodyworks made of stainless steel or painted with a special dye.**
- **Usage of polyethylene packages and/or bags is not permitted.**

7. VINTAGE AND WINEMAKING

Vintage on 1 ha vineyard shall be no more than 10 tons.

Wine production shall be no more than 650 liters – from 1 ton grapes.

8. WINEMAKING PRACTICE

Wine "Akhasheni" is produced by incomplete alcoholic fermentation of must.

The grapes are pressed and grape stems – removed. The temperature for alcoholic fermentation shall not exceed 30°C, the process is terminated naturally and/or as a result of coldness and sulphitation. Apple-lactic acid fermentation does not take place.

Increasing of sugar content in grape juice, must and wine with the sugar, sweet concentrate or other substances is prohibited.

Wine "Akhasheni" shall be represented on consumer market only packed in the bottles.

9. LINK BETWEEN EXCLUSIVE QUALITY, CHARACTERISTICS AND/OR REPUTATION WITH GEOGRAPHICAL AREA

9.1. NATURAL FACTORS

Climate

The formation of weather in the micro-zone is caused by atmospheric processes developed in subtropical and moderate areas and moved from the East and West longitudes. The climate in the micro-zone is moderately humid, with hot summer and mild winter. The direction of the River Alazani has great importance. Cold air masses move from the North-West to South-East on the foothills of the Northwest slopes of Tsiv-Gombori Range, the gorges, and high tops of Kakheti Caucasus glaciers.

In the micro-zone the formation of grape grains (in the second half of June, July and the first half of August), and clear sky (from the second half of August to the end of

September) continues, correspondingly, 16 and 8 days during maturity. The number of days without sun in said periods does not exceed 3 and 1.

Annual duration of sunshine in the micro-zone Akhasheni ranges between 2150-2200 hours. During the vegetation period the sunshine continues 1600 hours. Solar radiation on the right side of the River Alazani, in the micro-zone Akhasheni, is higher than on the left bank of the river, which is due to less cloudiness. Annual radiation in Akhasheni is no more than 130 kcal/cm^2, but in the vegetation period it varies within 95-100 kcal/cm^2. Direct radiation on the horizontal surface is 75 kcal/cm2, and scattered – 54 kcal/cm^2.

Depending on the analysis of alluvial carbonate soil temperature, in the depth of 5-50 cm layer, the sustainable transition of temperature above 10°C occurs in the first decade of April. In a relatively deep (50-100 cm) layer, this term will be moved to mid-April.

Activation of root system begins in mid-May, when the soil temperature increases above 15°C in 10-120cm depth of the layer. From the mid-June to the end of September, over three months the soil temperature is above 20°C, and it reaches 24°C from mid-July to the end of August, in the depth of 70 cm. it reaches 24°C from mid-July to the end of August, in the depth of 40 cm.

The average annual air temperature is 12,5°C, at the warmest months (July, August) is 23,7- 23,5°C, and at the coldest month (January) is +1,1°C. In accordance with multiannual data, air annual absolute minimum temperature is averagely -10-11°C, and +35°C – for absolute maximum, and extreme temperatures are +23 and + 38°C.

Autumn frosts in the micro-zone start at the end of November (27.XI) and stop from 24.III. In the middle of April the frosts are expected once during 10 years.

In the micro-zone Akhasheni the sum of temperatures is 3950°C on 450 m level, and 3700°C–on 620 m.

Sustainable transition of air temperature above 10°C on 450 m-s takes place from 5.IV, and it's falling – from 4.XI.

Annual sum of atmospheric precipitations is 860 mm in the micro-zone Akhasheni and 637 mm – during the vegetation period.

Annual relative air humidity is 71%. Air moisture is the lowest at July (63%) and August (60%), and it is much more increased at the end of the autumn (78%) and winter (76-75%).

During warm period hailing days repetition is sharply reduced than in the Northwestern districts of Alazani right bank (Tsinandali, Telavi). Hailing days number is averagely between 1,6-2,1 per year. May (0,7 days) and June (0,5 days) are the the most hailing months during the year.

Saperavi buds opening takes place in the middle of April and flowering – at the end of May, the grape maturity begins in the second half of August. Grape technical ripening takes place at the end of September.

Snow cover is formed in the last decade of December (from 15.XII), melting – in mid-March. Snow cover is unstable – in 74% of years, the number of snowy days in winter is equal to 26.

In the micro-zone the West (32%) and South-West (23%) winds are prevailing. There are approximately 21% windless days, per year.

Average annual wind speed is 1.4 m/s. Wind speed is almost equal during all months, and the number of very windy days is only 4.

Soil

The main part of the territory is consisted with slopes and trails slightly and moderately inclined towards the Southwest, North-East and East, it is passing to

slightly wavy surface, and then – to flat land towards the North-East direction and borders the first terrace of Alazani, longwise Chermiskhevi and Paprsikhevi.

In the micro-zone there are two types of rendzino-brown soils, two types of alluvial soils and one of

deluvial soils:

1) **Rendzino-brown, very thick, loamy;**
2) **Rendzino-brown, moderately thick, somewhere slightly leptosol with loam and heavy clay;**
3) **Alluvial carbonated, very thick, clay;**
4) **Alluvial carbonated, very thick, leptosol, clay;**
5) **Deluvial carbonated, very thick, loamy.**

Soils of the first two types are found in the extreme Southwestern part of the micro-zone on the North-Eastern slopes of Tsiv-Gombori Range, namely, in the area of Akhasheni on Papari fields and in the South-Western part of the Chumlaki area. The 3rd and 4th varieties of soils are presented in the central and North-Eastern parts of said villages, on the river Alazani second terrace, along the rivers Chermskhevi and Papriskhevi, on inclined and flat relief. The 5th variety of soil is mainly presented in the central part of the micro-zone, on the ends of the Southern slopes of Tsiv-Gombori Range and it creates slightly inclined trails.

First type soil profile thickness is 70-90 cm, and active humus layer is 50-60 cm. Second type – 60-90 cm, and the active humus layer is 40-50 cm; it is characterized with slightly loamy structure. Both soil types are developed on very carbonated clay-lime layers. The 3rd, 4th and 5th types of soils are characterized with deep thickness of profiles – 1.5 m, and active humus layer is 50-60 cm. They consist of alluvial clay-lime and clay-sand layers. First two types of soils are dark brown to black in the active humus layer. In transitional layer it is light brown to beige, and chandes to light beige to white, to the bottom. The 3rd, 4th and 5th soils are light brown and less differentiated. The 4th soil has loamy structure, contrary from others.

According to laboratory analysis data, the first two types of soils are characterized with clay and heavy clay mechanical content and the 3rd, 4th and 5th types of soils are clay. Humus content of first and second soil varieties is characterized with moderate index in the active layer – 3,5%, usually, and less – bellow

in the 3rd, 4th and 5th types of soils relatively low and varies within 1,5-3,0% in active layer. It is poor with hydrolyzed nitrogen, soluble phosphorus and exchange potassium. The first and second varieties of soils contain carbonates in average amount, in upper layers, very high amount – more than 40-50%, bellow, and average amount in the 3rd, 4th and 5th types of soils. Soil area reaction (pH) is characterized with moderate index and mainly varies within 7,5-8,6.

On the basis of conducted studies, agronomic properties of micro-zone soils provide the opportunity to produce high quality material for wine "Akhasheni".

Human Factor

It is known that Georgian wine companies had neither technological nor technical capabilities to make stable demi-doux wines until the 1940s.

On September 3, 1942, a meeting was held in Tbilisi with the participation of wineries, scientific institutions as well as scientists being in evacuation in Georgia (Professors – M.A. Gerasimov, A. A. Egorov, N.F. Saenko, and others) and winemakers representatives, they were entrusted with elaborating activities to provide and introduce modern wine-making technologies for demi-doux, and not only demi-doux wines.

Implementation of the activities planned at the meeting was entrusted to the Department of Agriculture of the Academy of Sciences, which fulfilled the task excellently – new factories equipped with modern technologies and techniques were built in various micro-zones, including village Zegaani.

Naturally demi-doux wine "Akhasheni", created by leading specialists of "Samtresti", has been produced since 1958.

At various international competitions and exhibitions held before 1990, Akhasheni was awarded 11 medals, including 6 gold and 5 silver medals.

Geographical location of Akhasheni micro-zone, the climate characteristic for the region: moderately warm winter and hot summer, moderate amount of atmospheric sediments, diversity of soils, specific features of Saperavi and/or Saperavi Budeshuri-like grape varieties and the centuries-old local tradition of viticulture and winemaking produce the unique organoleptic features of wine Akhasheni, characteristic only of this wine.

10. SPECIAL LABELING AND PACKAGING RULES

The name "Akhasheni" and the sign – "Protected Designation of Origin" on the label, package, in the documents accompanying the wine, and advertising materials, used in foreign languages, shall be presented as follows:

In Latin Character – AKHASHENI Protected Designation of Origin and/or PDO

In Cyrillic Character – АХАШЕНИ Защищённое наименование места происхождения

11. TRANSITIONAL PROVISIONS

12. ACCOUNTING AND NOTIFICATION

Accounting and notification of production and storage technological processes of wine "Akhasheni" is carried out in accordance with the rules established by the legislation of Georgia.

13. MAIN CONTROLLABLE POINTS

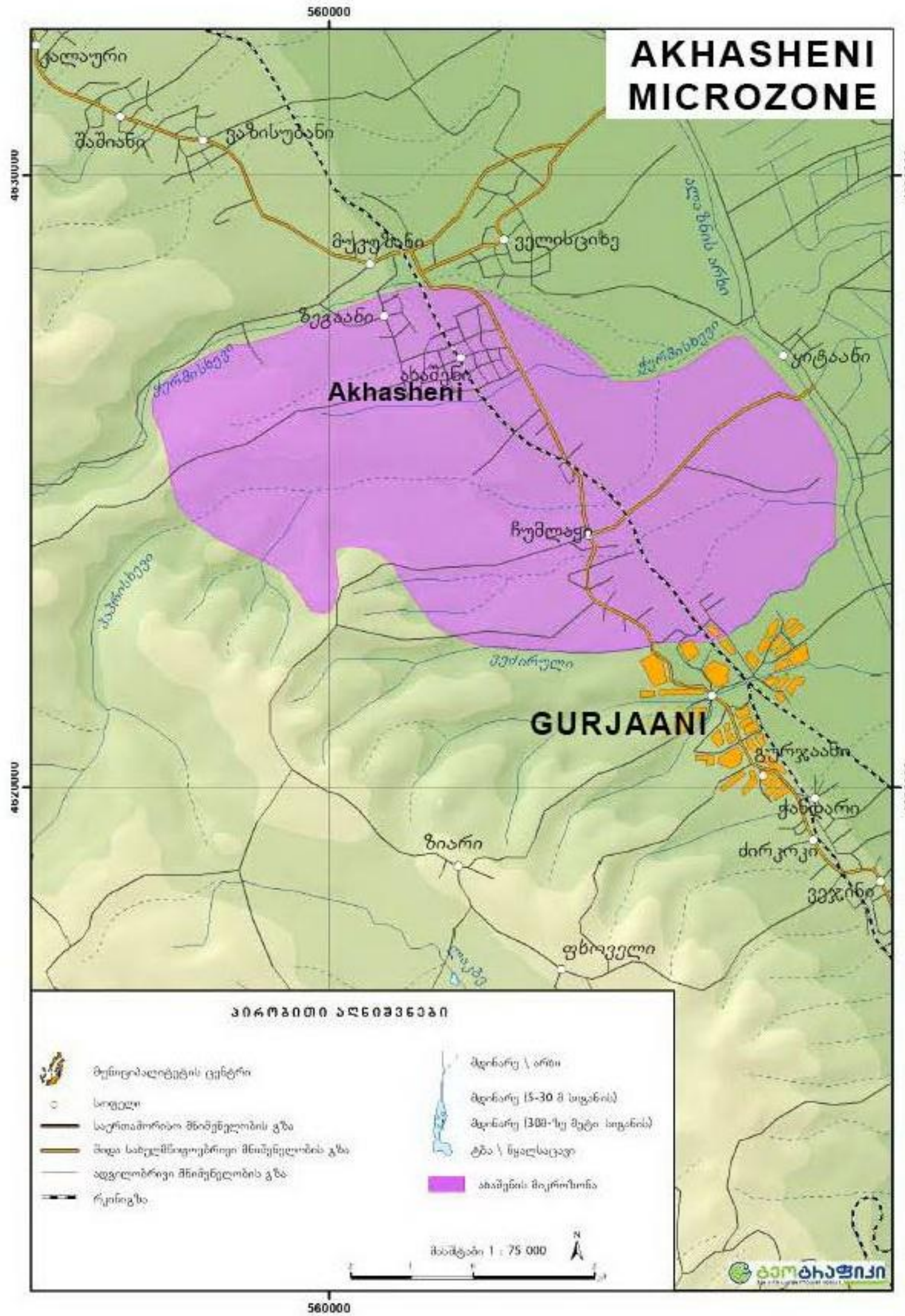
During control of the Protected Appellation of Origin wine "Akhasheni" production process the producer shall satisfy the requirements established by LEPL National Wine Agency, and shall comply with the following parameters:

Main Controllable Points	Evaluation Methods
Vineyard location	Cadaster map, control on the place
Area	Vineyard accounting magazine, cadaster
Vine variety	Vineyard accounting journal, control on the place
Cultivation methods	Journal of registration of Agrotechnical Measures, treating journal, control on the place
Vintage and transportation	Vintage journal
Grape harvest per ha	Vintage journal
Grape harvest in total	Vintage journal
Grape processing and winemaking	Grape receiving journal, grape processing journal, product turnover calculation journal, laboratory analysis journals, notifications, control on the place
Wine bottling, packaging and storage place and conditions	Bottling journal, journal for motion of ready product in the storehouse, laboratory analysis journals
Physico-chemical characteristics of the wine at winemaking, before and after bottling	Laboratory analysis journals
Organoleptic characteristics of the wine	Tasting commission protocols
Traceability	Technological and laboratory records

14. CONTROL BODY OF PRODUCTION

State control for observance of production specification and lawful usage of the Protected Appellation of Origin shall be carried out by LEPL National Wine Agency, according to the rules established by the legislation of Georgia.

15. MAP OF THE MICRO-ZONE


AKHASHENI
MICROZONE
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ზეგაანი
ახაშენი
Akhasheni
კოტაანი
ჩუმლაყი
GURJAANI
გურჯაანი
ჭანდარი
ძირკოკი
ვეჯინი
ზიარი
ფხოველი
პირობითი აღნიშვნები
მუნიციპალიტეტის ცენტრი
სოფელი
საერთაშორისო მნიშვნელობის გზა
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