

The wine I chose for my paper is the 2001 Cabernet Sauvignon from Columbia Valley. The winery that makes this wine is the Chateau Ste. Michelle, which is located in Woodinville, Washington near Seattle. The full address of Chateau Ste. Michelle is 14111 NE 145<sup>th</sup> St, Woodinville, WA 98072. The phone number of the vineyard is (425) 488-1133. The winery is owned by Ste. Michelle Wine Estates. Chateau Ste. Michelle's appellation is Columbia Valley AVA. The appellation is located in central, south central, and southeastern Washington with part of the appellation spilling across the border into Oregon. The main environmental threats of the Columbia Valley are early and late season frosts, and also hard winter freezes. Phyloxera is not established in the Valley due to the dry temperatures and sandy soils. The peak ripening of the grapes occurs in the last four to six weeks of the growing season. Chateau Ste. Michelle is Washington State's oldest winery. The winery was founded as the American Wine Company, which was a 1954 merger of the National Wine Company and the Pomerelle Wine Company. The chateau is "French style" and consists of 87 acres of land. In 1967 the American Wine Growers launched "Ste. Michelle" wines made from vinifera grapes grown in eastern Washington. The first varieties produced by the winery were Cabernet Sauvignon, Pinot Noir, Semillon, and Grenache Rosé. In 1973 the American Wine Growers sold the company to a group of investors from Seattle, and in 1974 construction of Chateau Ste. Michelle in Woodinville began, which would eventually become the company's headquarters. In the year 1989, nearly two decades after chateau Ste. Michelle's debut, the Washington wine industry became America's second largest producer of classic wines with over 80 wineries and 11,000 acres of vinifera vines. In 2003 Bob Bertheau was named the head winemaker for Chateau Ste. Michelle. Ted Baseler is the President and Chief Executive Officer, and Doug Gore is the Executive Vice President of winemaking, vineyards, and operations. The vineyard produces over 2,000,000 cases a year, making it the world's leading producer of Riesling wine. The growing season is 180-200 days. The winery distributes internationally. The 2001 Cabernet Sauvignon has a total acidity of 0.59 g/100 ml. The pH is 3.65. The alcohol is 13.8%. The blend is 100% Cabernet Sauvignon. The bottling date is April 2003. The recommended food pairing for this wine are bleu cheese, duck, beer, veal, and dark chocolate. Herbs that are recommended for pairing with this wine are mustard, paprika, rosemary, and thyme. Spices that are recommended for pairing with this wine are allspice, cloves, ginger, mace, and nutmeg. In 2001, the mild winter and spring weather continued into a long, warm, and dry and stable growing season. The September harvest conditions are described as "ideal", with very warm, clear days and cool nights. In October, the temperatures cooled slightly, which allowed the fruit more time on the vine for increased ripeness. The size of the berry was smaller than usual, thus producing a fruit with ripe varietal characteristics. Overall, the fruit quality of 2001 was described as excellent, thus contributing to the state's fourth consecutive outstanding vintage. The Columbia Valley vineyards lie in the rain shadow of the Cascade Mountains. The mountains shield the rain limiting annual rainfall to 6-8 inches, which allows the vineyard managers to control vine vigor through irrigation. All of the vines in Columbia Valley are planted on their own rootstock. The soils in the Columbia Valley are sandy with low fertility and low water-holding capacity, which enables precise control of vine growth. Days are warm and sunny with cool evening temperatures, which create ideal conditions for intense aroma and flavor development in the ripening grapes. The Columbia Valley has a northerly latitude, which gives about two more hours of sunlight daily during the peak-growing season than California, which also increases the region's ability to ripen fruit. During the winemaking process of this wine, the grapes were destemmed, crushed, inoculated with Premier Curvée yeast in order to initiate fermentation. In order to extract color and flavor and produce soft, supple tannins, twice-daily gentle pumpovers during a 9-day fermentation were used. The wine was gravity raked 3-4 times per year, and barrels were topped monthly. A 100% barrel was used and aged 16 months in French and American Oak. The tasting notes of the wine are described as, "Rich, ripe, and powerful in flavor, yet beautifully refined to show off delicate jam, loganberry, plum and blueberry notes. A seductive wine, with pretty integrated oak and aromas of honey, cinnamon and chocolate. Velvety tannins linger on the long and lingering finish". The wine is bottle in a Bordeaux bottle. The bottle closure that is used for this wine is a non-synthetic cork. The suggested retail price for a 750 mL bottle is \$15.00. The suggested retail price for a 1.5 L bottle is \$50.00. In order to reduce soil erosion, Chateau Ste. Michelle's viticulture team plants a green cover consisting of beneficial green grasses and cereal grains between the rows of vines. Additionally, the green cover provides a habitat to attract insects that are beneficial to the vineyards. The vineyards are also equipped with drip irrigation systems, which deliver an exact amount of water to the vines only when needed.

By: Andrea Rinicella, HORT 420, Concepts In Wine Production, Texas A&M, Spring 2017

Sources: 1. <https://www.ste-michelle.com> 2. <https://www.washingtonwine.org/wine/facts-and-stats/regions-and-avas/columbia-valley>