EXHIBIT F



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July 23, 2018 (Revised December 3, 2018 and January 25, 2019)

Robert Long c/o Berryman and Montalbano Attention: Kelly Berryman P.O. Box 513 Calistoga, CA 94515 kelly@berrymanmontalbano.com RECEIVED

FEB 14 2019

Napa County Planning, Building & Environmental Services

Project Number: 5492.07.06.2

Landslide Hazard Evaluation Wappo Land Company Vineyard Block A Assessor's Parcel Number (APN) 030-220-044 Napa County, California

The purpose of this letter is to provide geologic information regarding the planned vineyard planting within portions of APN 030-220-044 in Napa, California. The project site plan has been prepared by Applied Civil Engineering, titled "Wappo Land Company LLC, Vineyard Development Erosion Control Plan" and dated January 2019. This letter is being prepared with the intent to comply with Napa County Code Section 18.108.027 (F).

Our geologic publication research included reviewing the following information:

Bezore, S.P., et al., 2005, Geologic Map of the Yountville 7.5' Quadrangle, Napa County, California, California Geological Survey, Scale 1:24,000.

Dwyer, M.J., Noguchi, N., and O'Rourke, J., 1976, Reconnaissance Photo-Interpretation Map of Landslides in 24 Selected 7.5-Minute Quadrangles in Lake, Napa, Solano, and Sonoma Counties, California: U.S. Geological Survey OFR 76-74, 25 Plates, Scale 1:24,000.

National Center for Airborne Laser Mapping (NCALM), 2003, LiDAR, Napa Watershed, California, Opentopo.sdsc.edu.

Natural Resources Conservation Service, United States Department of Agriculture, accessed July 2018. Web Soil Survey, available online at http://websoilsurvey.nrcs.usda.gov/.

Based on our geologic review we compiled the image and table below indicating the soil types and depth of materials. This information was collected from the NRCS Web Soil Survey listed above.





Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid	Plasticity
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200	limit	index
			In				L-R-H	L-R-H	L-R-H	L-R-H	L-R-H	L-R-H	L-R-H	L-R-H
154—Henneke gravelly loam, 30 to 75 percent slopes														
Henneke	85	D	0-7	Gravelly loam	GC-GM, GC, CL-ML, CL	A-5, A-4	0- 0- 0	0-15- 30	55-75- 95	50-68- 85	45-63- 80	35-55- 75	33-42 -51	13-16-16
			7-15	Very gravelly clay, very gravelly clay loam	SC, GC	A-7, A-6, A-2	0- 0- 0	0-15- 30	50-65- 80	30-53- 75	30-50- 70	25-45- 65	44-50 -66	25-28-40
			15-25	Unweathered bedrock	-	-	0- 0- 0	-	-	-	-	-	-	_
176—Rock outcrop- Hambright complex, 50 to 75 percent slopes														
Rock outcrop	60		0-10	Unweathered bedrock	-	-	_	_	_	_	_	_	-	_
Hambright	30	D	0-12	Very stony loam	CL-ML, CL	A-6, A-4	0- 0- 0	50-63- 75	90-95-100	85-93-100	75-85- 95	55-73- 90	15-23 -30	5-10-15
			12-22	Unweathered bedrock	-		0- 0- 0	-	-	-	_	-	-	_
178—Sobrante loam, 5 to 30 percent slopes														
Sobrante	85	С	0-6	Loam	ML	A-4	0- 0- 0	0- 0- 0	95-98-100	75-83- 90	70-78- 85	55-63- 70	23-32 -41	6-11-17
			6-30	Silty clay loam, clay loam, loam	CL	A-5	0- 0- 0	0- 3- 5	95-98-100	75-83- 90	70-80- 90	55-68- 80	35-40 -46	17-21-25
			30-40	Unweathered bedrock	_	_	0-0-0	_	_	_	_	-	_	-

On July 11, 2018 we performed a geologic reconnaissance of the site and vicinity. We observed the vineyard blocks shown on the preliminary plans and various access roads. We paid particular interest to drainages and steeper sloping areas.



Based on our geologic review and reconnaissance, we judge that it is geologically feasible to grade and plant the subject vineyard slopes as planned. We did not identify any large-scale slope instabilities within the vineyard blocks during our publication review and did not observe any slope failures or landslides at the project site during our reconnaissance.

We judge the risk of global slope instability, both currently and after vineyard development, to be low. As such, erosion of the site surface soils should be considered the primary slope condition of concern. If erosion control measures are installed and maintained in accordance with County of Napa Regulations, we judge the risk of erosional failure at the site to be low.

We trust this provides the information you require at this time. Please call if you have questions.

Very truly yours, RGH Consultants

Ryan E. Padgett Project Manager

Jared J. Pratt Principal Engineering Geologist

REP:JJP:hdb:lw

No. 2620

No. 2620

No. 2620

No. 2453

E OF CALIF

Mike Muelrath

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