

Appendix 3. Tabulated Observations and Photographs of Surface Faulting and Ground Deformation Produced by the M_w 6.0 South Napa Earthquake of August 24, 2014—Trace B

Introduction

The following pages contain maps and tables of descriptions, slip measurements, and photographs of surface faulting and ground deformation features obtained in the field at observation stations located along Trace B. Station locations are shown as circles in figure 3.1 and labeled by the Station ID number. To aid in locating a specific observation station, IDs increase numerically from south to north. Where multiple observations occur at the exact same locality, IDs are shown as a range (for example, 200–202 identifies stations 200, 201, and 202 all at the same location). Where stations are too closely spaced to be individually labeled in the figures, a single label is used for a group of stations, with the IDs or groups of IDs listed in a vertical column and the label leader pointing to the approximate midpoint of the group of closely spaced stations. Mappable fault rupture and surface deformation features are symbolized on the included maps as described in appendix 1.

Observations and (or) photographs collected at each station are tabulated by Station ID. Where stations occur at the same locality, earlier observations are listed first. Photographs taken at an observation station, if any, follow the station attribute information; high resolution images can be downloaded by clicking on the associated links. Station and photograph attributes are described in detail in appendix 1.

Trace B

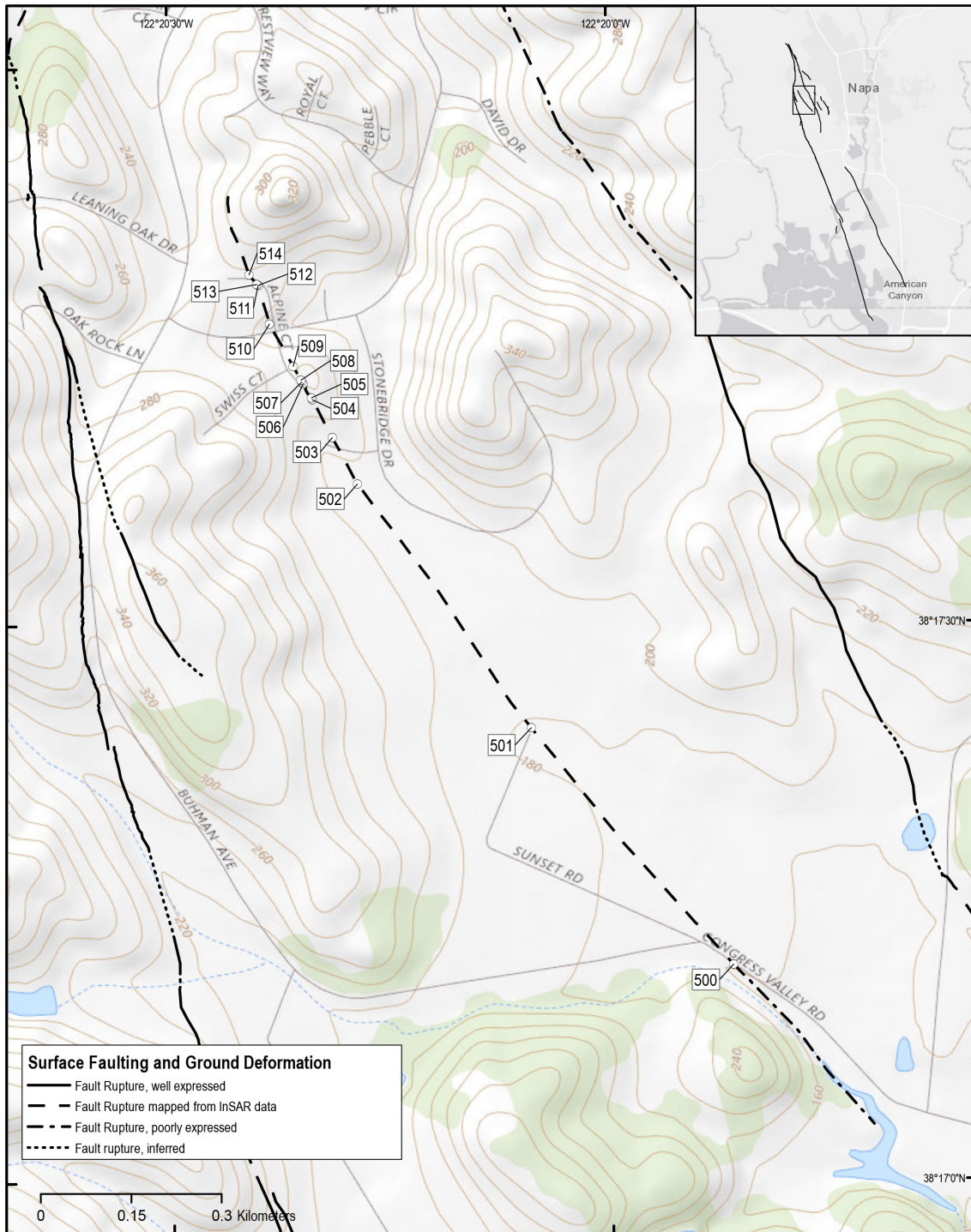
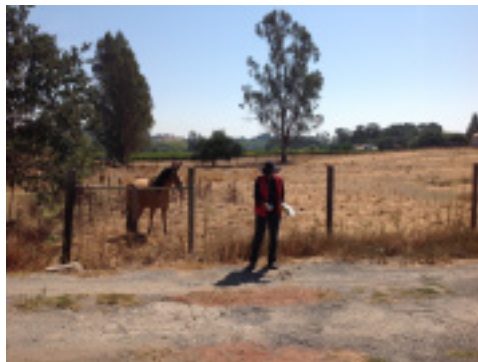


Figure 3.1. Rupture map showing locations of observation stations 500–514 along Trace B of the West Napa Fault System, California, from intersection of Sunset Road and Congress Valley Road north to Twin Oaks Drive. Inset shows location of fig. 3.1 relative to full extent of rupture. Shaded relief base from U.S. Geological Survey National Map <https://viewer.nationalmap.gov/advanced-viewer/>.

Station ID: 500			Observer: Prentice/Sickler			
Observation date	Latitude	Longitude	Offset feature	Inferred origin		
2014:09:11	38.28656	122.33103	Pavement	Tectonic		
Description						
Congress Valley Road where UAVSAR suggests possible location of deformation. Several fresh cracks cross the asphalt road; most prominent crack trends N15W; very small right-lateral component, ~1 mm.						
Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
345	~0.1*	RL				

Station ID: 501			Observer: Prentice/Sickler			
Observation date	Latitude	Longitude	Offset feature	Inferred origin		
2014:09:11	38.29011	122.33483	Pavement	Tectonic		
Description						
Sunset Road at end of public access. Cracks across road trend N50W. Water meter box recently dug up—new repair? Another water meter box has lid popping up, related to earthquake?						
Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
310						
Photographer	Camera coordinates		Photograph date			
Prentice	38.29012	122.33480	2014:09:11	12:22:14		

[High Resolution Photograph](#)



Station ID: 502		Observer: Prentice/Sickler		
Observation date	Latitude	Longitude	Offset feature	Inferred origin
2014:09:11	38.29377	122.33810	Pavement	Tectonic
Description				
Driveway shows distributed cracking where lineament crosses; no clear tectonic signal, but there is fresh damage.				

Station ID: 503		Observer: Prentice/Sickler				
Observation date	Latitude	Longitude	Offset feature	Inferred origin		
2014:09:11	38.29447	122.33857	Curb/Sidewalk	Tectonic		
Description						
Curb in Stonebridge Court is damaged and very small left-lateral offset. Cracks continue across asphalt to south (trend N24W). Asphalt pulled away, 3 cm opening. Multiple curbs fractured.						
Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
336		LL	3*			
Photographer	Camera coordinates		Photograph date			
Prentice	38.29450	122.33852	2014:09:11 11:50:32			

High Resolution Photograph



Station ID: 503

Observer: Prentice/Sickler

Photographer	Camera coordinates		Photograph date
Prentice	38.29443	122.33862	2014:09:11 11:51:00

[High Resolution Photograph](#)



Photographer	Camera coordinates		Photograph date
Prentice	38.29435	122.33852	2014:09:11 11:52:07

[High Resolution Photograph](#)



Station ID: 503

Observer: Prentice/Sickler

Photographer	Camera coordinates		Photograph date
Prentice	38.29430	122.33836	2014:09:11 11:57:16

[High Resolution Photograph](#)



Photographer	Camera coordinates		Photograph date
Prentice	38.29428	122.33849	2014:09:11 11:57:51

[High Resolution Photograph](#)



Station ID: 504		Observer: Rubin/Seitz				
Observation date	Latitude	Longitude	Offset feature	Inferred origin		
2014:09:16	38.29504	122.33894	Curb/Sidewalk	Tectonic		
Description						
Many cracks in asphalt street. Most look preexisting with no obvious preferred orientation but have opened. Permissible RL offset at driveway curb joint. Fresh cracking in cement driveway trends 338.						
Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
338		RL				
Photographer	Camera coordinates		Photograph date			
Seitz	38.29504	122.33892	2014:09:16 15:40:41			

[High Resolution Photograph](#)




Photographer	Camera coordinates		Photograph date		
Seitz	38.29504	122.33892	2014:09:16 15:40:45		

[High Resolution Photograph](#)



Station ID: 504		Observer: Rubin/Seitz	
Photographer	Camera coordinates		Photograph date
Rubin	38.29503	122.33887	2014:09:16 15:43:10
High Resolution Photograph			
			

Station ID: 505		Observer: Prentice/Sickler				
Observation date	Latitude	Longitude	Offset feature	Inferred origin		
2014:09:11	38.29507	122.33896	Curb/Sidewalk	Tectonic		
Description						
Fresh curb cracks in front of house at curb joint, 20mm right-lateral.						
Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
	2*	RL				
Photographer	Camera coordinates		Photograph date			
Prentice	38.29510	122.33900	2014:09:11 11:26:30			
High Resolution Photograph						
						

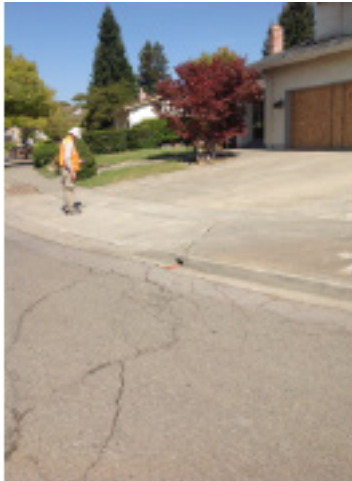
Station ID: 506		Observer: Prentice/Sickler		
Observation date	Latitude	Longitude	Offset feature	Inferred origin
2014:09:11	38.29527	122.33912	Pavement	Tectonic
Description				
Driveway cracks and en echelon cracks across road. Garage door recently removed and has temporary repair. Curb and asphalt popped up.				
Photographer	Camera coordinates		Photograph date	
Prentice	38.29516	122.33910	2014:09:11 11:26:54	

[High Resolution Photograph](#)



Photographer	Camera coordinates		Photograph date
Prentice	38.29524	122.33916	2014:09:11 11:27:40

[High Resolution Photograph](#)



Station ID: 506**Observer: Prentice/Sickler**

Photographer	Camera coordinates		Photograph date
Prentice	38.29529	122.33913	2014:09:11 11:30:26

[High Resolution Photograph](#)



Photographer	Camera coordinates		Photograph date
Prentice	38.29529	122.33915	2014:09:11 11:30:32

[High Resolution Photograph](#)



Photographer	Camera coordinates		Photograph date
Prentice	38.29529	122.33906	2014:09:11 11:32:23

[High Resolution Photograph](#)



Station ID: 507				Observer: Rubin		
Observation date	Latitude	Longitude	Offset feature	Inferred origin		
2014:09:16	38.29530	122.33914	Curb/Sidewalk	Tectonic		
Description						
Fresh cracking in cement sidewalk and driveway. Crack trends N17W.						
Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
343						
Photographer	Camera coordinates			Photograph date		
Rubin				2014:09:16 15:41:00		

[High Resolution Photograph](#)



Station ID: 508				Observer: Seitz
Observation date	Latitude	Longitude	Offset feature	Inferred origin
2014:09:16	38.29534	122.33916	Curb/Sidewalk	Tectonic
Photographer	Camera coordinates		Photograph date	
Seitz	38.29535	122.33916	2014:09:16 15:43:16	

[High Resolution Photograph](#)



Photographer	Camera coordinates		Photograph date	
Seitz	38.29535	122.33916	2014:09:16 15:43:20	

[High Resolution Photograph](#)



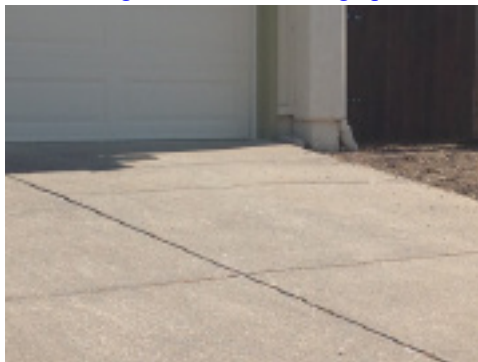
Station ID: 509		Observer: Prentice/Sickler		
Observation date	Latitude	Longitude	Offset feature	Inferred origin
2014:09:11	38.29554	122.33930	Curb/Sidewalk	Tectonic
Photographer	Camera coordinates		Photograph date	
Prentice	38.29556	122.33937	2014:09:11 11:16:28	

High Resolution Photograph



Photographer	Camera coordinates		Photograph date	
Prentice	38.29554	122.33937	2014:09:11 11:16:37	

High Resolution Photograph



Station ID: 510		Observer: Prentice/Sickler				
Observation date	Latitude	Longitude	Offset feature	Inferred origin		
2014:09:11	38.29617	122.33975	Curb/Sidewalk	Tectonic		
Description						
Intersection of Alpine Court and Twin Oaks; damaged curb. Crossing intersection heading south is zone of fresh left-stepping en echelon cracks amid many old random cracks in asphalt. House at Alpine Court shows minor damage of garage and cracks through driveway pavement.						
Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
RL						

Station ID: 510 **Observer: Prentice/Sickler**

Photographer	Camera coordinates		Photograph date
Prentice	38.29622	122.33961	2014:09:11 11:09:54

[High Resolution Photograph](#)



Station ID: 511 **Observer: Prentice/Sickler**

Observation date	Latitude	Longitude	Offset feature	Inferred origin
2014:09:11	38.29675	122.33996	Pavement	Tectonic

Description

Compressional pavement damage. Vertical scarp <5 cm. Compiler note: Upthrown side inferred from photo.

Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
					5*	E

Photographer	Camera coordinates		Photograph date
Prentice	38.29681	122.34003	2014:09:11 11:04:59

[High Resolution Photograph](#)



Station ID: 511 **Observer: Prentice/Sickler**

Photographer	Camera coordinates		Photograph date
Prentice	38.29678	122.33996	2014:09:11 11:05:44

[High Resolution Photograph](#)



Station ID: 512 **Observer: Seitz**

Observation date	Latitude	Longitude	Offset feature	Inferred origin
2014:09:16	38.29675	122.33996	Pavement	Tectonic

Photographer	Camera coordinates		Photograph date
Seitz	38.29682	122.34000	2014:09:16 15:38:54

[High Resolution Photograph](#)



Station ID: 513 **Observer: Prentice/Sickler**

Observation date	Latitude	Longitude	Offset feature	Inferred origin
2014:09:11	38.29677	122.33998	Curb/Sidewalk	Tectonic

Description

Curb on south side of street shows about 3 mm right-lateral. Crack trends N11E.

Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Upthrown side
	0.3*	RL				

Station ID: 513

Observer: Prentice/Sickler

Photographer	Camera coordinates		Photograph date
Prentice	38.29680	122.34007	2014:09:11 11:04:17

[High Resolution Photograph](#)



Photographer	Camera coordinates		Photograph date
Prentice	38.29679	122.34006	2014:09:11 11:04:46

[High Resolution Photograph](#)



Station ID: 514 **Observer: Prentice/Sickler**

Observation date	Latitude	Longitude	Offset feature	Inferred origin
2014:09:11	38.29691	122.34013	Curb/Sidewalk	Tectonic

Description

Alpine Court. Two cracks in curb on north side of street show small right-lateral, about 1 cm each. Cracks are 93 cm apart. Eastern crack trends N16E, western crack trends N5E. Other curb cracks and damage occur within a zone about 20 m wide, including another curb crack with about 8 mm right-lateral, crack trends N4W. Left-stepping en echelon zone of cracks crosses street to the south. Zone trends N22W.

Fault azimuth	Strike slip	Strike-slip sense	Extension	Compression	Vertical	Uprthrown side
	2.8*	RL				

Photographer	Camera coordinates	Photograph date
Prentice	38.29720 122.33969	2014:09:11 11:01:19

[High Resolution Photograph](#)



Photographer	Camera coordinates	Photograph date
Prentice	38.29699 122.34003	2014:09:11 11:01:48

[High Resolution Photograph](#)



Station ID: 514

Observer: Prentice/Sickler

Photographer	Camera coordinates		Photograph date
Prentice	38.29691	122.34012	2014:09:11 11:02:44

[High Resolution Photograph](#)



Photographer	Camera coordinates		Photograph date
Prentice	38.29694	122.34010	2014:09:11 11:03:19

[High Resolution Photograph](#)



Station ID: 514

Observer: Prentice/Sickler

Photographer	Camera coordinates		Photograph date
Prentice	38.29684	122.34008	2014:09:11 11:03:48

[High Resolution Photograph](#)

