

DEGREE QUADRANGLE 37°-38°, 121°-122°

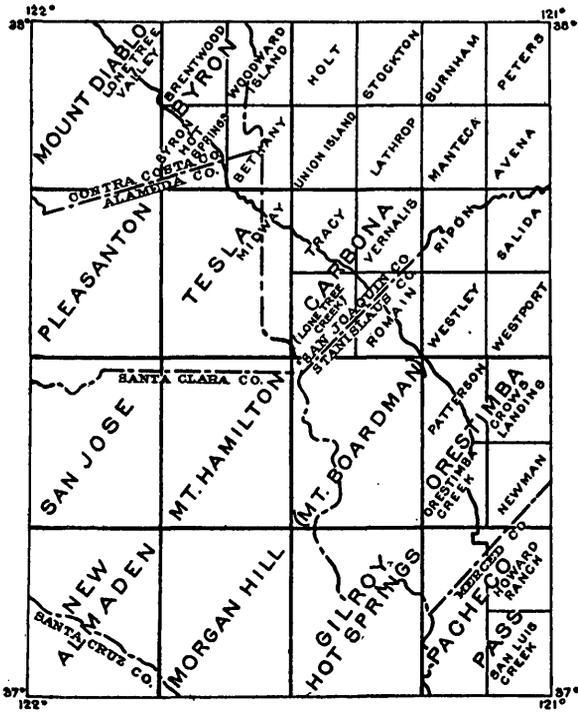


FIGURE 35.—Diagram of degree quadrangle 37°-38°, 121°-122°

AVENA QUADRANGLE

[Latitude 37° 45'-37° 52' 30"; longitude 121°-121° 07' 30"]

SAN JOAQUIN COUNTY

Primary leveling by G. L. Hagman in 1911

Near River School

	Feet
River School, 2.4 miles east of, north side of road, in base of fence post; spike, aluminum tag stamped "101.35"-----	100.96
River School, 1.4 miles east of, southwest corner of T road north; iron post stamped "93 B 1911"-----	93.469
River School, 0.3 mile east of, southwest corner of T road, in base of fence post; spike, aluminum tag stamped "88.34"-----	87.48
River School, 1.8 miles west of, northwest corner of T road, in base of telephone pole; spike, aluminum tag stamped "81.33"-----	80.27
River School, 1.8 miles west of, northwest corner of T road, in base of fence post; spike, aluminum tag stamped "73.32"-----	72.74
Ripon, 2.7 miles northeast of, southeast corner of road crossing; iron post stamped "67 B 1911"-----	67.638

	Feet
<b>From point 3 miles north of Escalon northwest along Mariposa Road to Collegeville</b>	
Escalon, 4 miles northwest of, near Blundell ranch, on east side of road, in base of fence post; spike, aluminum tag stamped "105.50"	105.18
Escalon, 4.8 miles northwest of, where road is crossed by power line, south side of road, in base of telephone pole; spike, aluminum tag stamped "104.51"-----	103.87
Escalon, 5.7 miles northwest of, southeast corner of road forks, in base of fence post; spike, aluminum tag stamped "90.52"-----	90.18
Escalon, 6.5 miles northwest of, southeast corner of road crossing, in base of corner fence post; spike, aluminum tag stamped "88.53"--	88.69
Collegeville, 4.5 miles southeast of, south side of road, under Lone Tree triangulation station; iron post stamped "75 B 1911"-----	75.570
<b>From point 2 miles southeast of Collegeville south along highway to Ripon. (An excessive error has been distributed in this line.)</b>	
Santa Fe Ry. crossing; top of north rail-----	68.3
Wildwood School, 0.2 mile south of, on east side of road, in base of fence post; spike, aluminum tag stamped "63.57"-----	63.33
Wildwood School, 1.2 miles south of, on east side of road, opposite ranch house, in base of fence post; spike, aluminum tag stamped "61.58"-----	60.73
Atlanta, 1.7 miles northeast of, at Cooks Corner, northwest corner of crossroads; iron post stamped "64 B 1911"-----	62.917
Atlanta, 0.7 mile north of, 75 feet north of east-west fence, on west side of road, in base of fence post; spike, aluminum tag stamped "60.59"-----	59.12
Ripon, 4 miles north of, northwest corner of T road west, in base of telephone pole; spike, aluminum tag stamped "63.60"-----	62.50
Ripon, 3.2 miles north of, northwest corner of T road west, in base of fence post; spike, aluminum tag stamped "65.61"-----	64.11
Ripon, 2.5 miles north of, on east side of road opposite Ellis ranch, across road from large oak tree; iron post stamped "72 B 1911"-----	71.314
Ripon, 1.7 miles north of, on east side of road, in base of telephone pole 513-106; spike, aluminum tag stamped "63.62"-----	62.11

**BYRON QUADRANGLE, COMPRISING BETHANY, BRENTWOOD, BYRON HOT SPRINGS, AND WOODWARD ISLAND 7½' QUADRANGLES**

[Latitude 37° 45'-38°; longitude 121° 30'-121° 45']

**ALAMEDA, CONTRA COSTA, AND SAN JOAQUIN COUNTIES**

Primary leveling by B. A. Jenkins in 1907 and L. F. Biggs in 1910

**From Bethany Ferry to Bethany**

	Feet
Bethany, 100 feet east of station, on edge of right of way; iron post stamped "36, 1910, 4"-----	36.495

Primary leveling by L. F. Biggs in 1919

**From Union Island quadrangle northwest along Southern Pacific R. R. to Bethany**

Bethany, 1 mile southeast of, east end of concrete highway culvert, chiseled "U. S. 23"-----	23.45
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From point 1 mile west of Camp No. 1 landing to Bixler

	Feet
Camp No. 1 landing, 1 mile west of, south bank of canal, 10 feet south of pumping plant, in top of pile; copper nail with aluminum tag stamped "2"-----	2. 77
Old River Farms Co. landing No. 5, 800 feet east of, south edge of levee at road leading south, 40 feet east of canal, 50 feet south of pump house; iron post stamped "2, 1910, 18"-----	2. 077
Old River Farms Co. landing No. 3, 50 feet north of office, in base of telephone pole; spike with aluminum tag stamped "7"-----	7. 12
Coney Island, upper end of, 1,000 feet south of edge of east levee of old river, 150 feet south of warehouse, 5 feet north of old building; iron post stamped "7, 1910, 19"-----	7. 508
Old Ferry, 1 mile north of, west bank of canal, northwest corner of house, in root of willow tree; copper nail with 0 aluminum tag stamped "1"-----	1. 00
Mouth of Italian Slough, north levee, at landing; nail in top of snubbing post, aluminum tag stamped "11"-----	11. 37
Italian Slough, 0.7 mile north of, at junction of road west to Byron, at west edge of levee, near northwest corner of house; iron post stamped "1, 1910, 24"-----	1. 706
Italian Slough, 2 miles north of, west levee of Old River, 10 feet south of house, in root of willow tree; copper nail with aluminum tag stamped "0"-----	0. 94
Mansion House, 1.3 miles south of, west levee of Old River, 20 feet north of old house, in base of willow tree; spike with aluminum tag stamped "1"-----	1. 80
Mansion House, 1,000 feet north of, west levee of Old River, opposite canal between Victoria and Woodward Island, at northeast corner of old house; iron post stamped "3, 1910, 25"-----	3. 302
Mansion House, 1.3 miles west of, south bank of Indian Slough, at pump house, in base of power pole; spike with aluminum tag stamped "2"-----	2. 12
Mansion House, 2.5 miles west of, 2 miles south and 1 mile east of Bixler, 200 feet south of white house, 40 feet west of Indian Slough, at end of lane; iron post stamped "6, 1910, 26"-----	6. 934
Bixler, 2 miles south of, at crossroads, in base of gum tree; spike with aluminum tag stamped "12"-----	12. 28
Bixler, 1 mile south of, at crossroads, in base of power pole 0-20; spike with aluminum tag stamped "9"-----	9. 96

From Bethany north and west to Oakley

Bethany, 1.5 miles northwest of, at T road west, in base of telephone pole; spike with aluminum tag stamped "43"-----	43. 08
Mountain House School, 0.5 mile north by 1 mile west of, at T road north to Billy Campbell's ranch; iron post stamped "76, 1910, 20"-----	76. 081
Byron, 5.2 miles south of, at power-line crossing, in base of power pole, 68-12; spike with aluminum tag stamped "81"-----	81. 50
Byron, 3 miles southeast of, at junction of road to south, in base of power pole 1-8; spike with aluminum tag stamped "14"-----	14. 02
Byron, 1.5 miles south of, at junction of road to Byron Hot Springs, east of railroad right of way; iron post stamped "23, 1910, 21"-----	23. 471
Byron, south edge of town. 200 feet south of railroad crossing, in base of power pole 4-12; spike with aluminum tag stamped "25"-----	25. 73

	Feet
Byron, 2 miles west of, at junction of road to west, on fence line; iron post stamped "165, 1910, 22"-----	165.191
Byron, 3 miles west by 2 miles north of, 1,500 feet east of Marsh Creek bridge, 700 feet east of junction of Martinez and Brentwood roads, 150 feet north of road at point of hill, in boulder outcrop; aluminum tablet stamped "209, 1910, 23"-----	209.156
Brentwood, 0.5 mile southwest of, 800 feet south of storehouse west of road, in base of 60-inch oak tree; spike with aluminum tag stamped "160"-----	160.28
Stone House, 1 mile north of, on west bank of Marsh Creek, 100 feet south of windmill, in base of sycamore tree; spike with aluminum tag stamped "111"-----	111.64
Stone House, 2 miles north of, 60 feet west of Marsh Creek, 2 feet west of house; iron post stamped "27 1910 100"-----	101.023
Brentwood, 1 mile west of, west abutment of steel bridge over Marsh Creek; aluminum tablet stamped "81, 1910, 28"-----	81.419
Brentwood, 1.5 miles northwest of, in base of milepost 81, Southern Pacific R. R.; spike with aluminum tag stamped "82"-----	82.90
Brentwood, 2 miles northwest of, at road crossing, east of right of way; iron post stamped "95, 1910, 29"-----	95.549
Ohara, 0.5 mile southeast of, at junction of road to north, in base of telephone pole; spike with aluminum tag stamped "84"-----	84.52
Oakley, 1 mile west of, at crossroads, in base of power pole 18-14; spike with aluminum tag stamped "28"-----	29.80
Oakley, west end of station, 30 feet south of track; iron post stamped "19"-----	19.480

**From Middle River northeast to Empire Cut (unchecked spur line)**

Middle River, 1 mile north of, in base of power pole 1-3; spike with aluminum tag stamped "-2" (below sea level)-----	-1.647
Middle River, 3 miles northeast of, at Empire Cut Landing No. 12, in base of power pole 3-8; spike marked "-0"-----	0.24
Middle River, 3 miles northeast of, at Empire Cut Landing No. 12, in base of power pole 3-9; spike marked "0"-----	0.555

**From Tule west along Atchison, Topeka & Santa Fe Ry. to point 3 miles east of Antioch**

Tule, in front of signboard; top of rail-----	11.7
Middle River, in front of station; top of rail-----	16.5
Middle River, at southeast corner of cannery; iron post stamped "B 1907 3, 3"-----	3.692
Orwood, in front of station; top of rail-----	14.2
Werner, in front of signboard; top of rail-----	12.4
Bixler, in front of signboard; top of rail-----	15.4
Bixler, 200 feet southeast of signboard, at road corner, 20 feet east of section corner; iron post stamped "B 1907 15 4"-----	14.722
Knightsen, west end of station, 40 feet south of track; iron post stamped "B 1907 27 5"-----	28.860
Oakley, in front of station; top of rail-----	18.8

Primary leveling by J. A. Vogelson in 1896

From Neroly southeast along Southern Pacific R. R. to Brentwood, thence south along road to Livermore

	Feet
Brentwood, west of track at north end of platform; iron post stamped "77"-----	76.890
Vascoe School, opposite, on west side of road; iron post stamped "401"-----	401.377
Vascoe divide, east side of road; iron post stamped "970"-----	969.767

## BURNHAM QUADRANGLE

[Latitude 37° 52' 30''-38°; longitude 121° 07' 30''-121° 15']

## SAN JOAQUIN COUNTY

Primary leveling by G. L. Hagman in 1911

From point 8.5 miles east of Stockton along highway to point 2.5 miles east of Glenwood

	Feet
Chartville, 0.6 mile east of, near junction of Stockton-Milton road with Farmington road; iron post stamped "67" (Lippincott's b. m.)---	67.051
Chartville, junction of Copperopolis road and Jackstone lane, at southeast corner, in base of fence post; spike, aluminum tag Marked "60.1"-----	60.95
Stockton, 7 miles east of, on Copperopolis road, on north side of road, in base of water tank trestle; spike, aluminum tag marked "50.2"-----	50.87
Stockton, 6 miles east of, junction of Copperopolis and Hornage roads, in northeast corner of road forks; iron post stamped "46-B"-----	45.809
Glenwood School, 0.6 mile south of, at east edge of road, in base of gate post; spike, aluminum tag stamped "49.3"-----	48.74
Glenwood School, at southeast corner of crossroads, in base of telephone pole; spike, aluminum tag stamped "47.4"-----	46.72
Glenwood School, 1 mile east of, opposite county water tank, in base of telephone pole; spike, aluminum tag stamped "55.5"-----	54.76
Glenwood School, 2 miles east of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "64.6"-----	63.63
Lockeford, 11 miles south of, at intersection of roads, in base of power pole; nail, aluminum tab stamped "66.40"-----	66.15
Near Mount Carmel School	
Mount Carmel School, 1 mile north of, west edge of road, in base of 12-inch oak tree; spike, aluminum tag stamped "607"-----	60.31
Mount Carmel School, at northeast corner of road crossing; iron post stamped "58 B"-----	58.653
Mount Carmel School, 1.1 miles east of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "67"-----	67.51
From point 2.1 miles south of French Camp north along highways via Burnham to Mount Carmel School	
French Camp, 2.1 miles south of, on east side of railroad, at road crossing, 200 feet south of milepost 85 (now S4), at fence line; iron post stamped "19 B 1901"-----	19.357

	Feet
French Camp, 2.1 miles south by 1 mile east of, northwest corner of T road west, in base of fence post; spike, aluminum tag stamped "20.64" (in Manteca quadrangle)-----	20.74
Castle School, 2.9 miles northeast of, at private T road east to Myer ranch, on west side of road, in base of fence post; spike, aluminum tag stamped "42.70"-----	42.48
Burnham, 2 miles southwest of, 300 feet southwest of Kaiser ranch, on east side of old lane, in base of oak tree; spike, aluminum tag stamped "47.71"-----	47.79
Burnham, 0.9 mile south of, on west side of road, in base of fence post; spike, painted and scribed "U. S. B. M. 53"-----	53.47
Burnham, southwest corner of railroad crossing, edge of right of way; iron post stamped "54 B 1911"-----	54.687
Burnham, 1 mile north of, at Collegeville, southwest corner of cross-roads, in base of fence post; spike, scribed and painted "U. S. B. M. 57"-----	57.16
Burnham, 2 miles north of, on east side of road, in base of gate post; nail, painted and scribed "U. S. B. M. 57"-----	57.71
Mount Carmel School, 0.6 mile south of, on east side of road, in base of gate post; spike, painted and scribed "U. S. B. M. 58"-----	57.97
<b>From Collegeville east along highways 2.5 miles</b>	
Collegeville, 1 mile southeast of, in base of county windmill; spike, painted and scribed "U. S. B. M. 63"-----	63.22

**BURNHAM, HOLT, PETERS, STOCKTON, TRACY, AND WESTLEY QUADRANGLES**

[Latitude 37° 30'-38°; longitude 121°-121° 30']

**SAN JOAQUIN AND STANISLAUS COUNTIES**

Primary leveling by J. B. Lippincott in 1896 and B. A. Jenkins in 1907

**At Stockton**

	Feet
Stockton, southwest corner of Scott Ave. (south side of Mormon Channel) and Center St., on north iron doorsill, west end of Cool Corner saloon; "Cool Corner" bench mark-----	16.033
Stockton, southwest corner of Scott Ave. and Center St., 18 feet from curb corner and 12 feet north of iron doorsill; iron post stamped "16"-----	16.373
Stockton, at southeast head of channel, corner of Weber Ave. and Eldorado St., east of steps at corner post; iron plate-----	13.114
Stockton, on north side of courthouse, west side of walk; on top of stone post-----	16.5
Stockton, San Joaquin courthouse, in angle of wall near columns, between north door and first window west of it; bronze tablet stamped "18"-----	18.353
Stockton, Southern Pacific R. R. passenger station, Milton & Oakland branch; top of rail-----	19.1

**From Stockton northeast along Milton road and Southern Pacific R. R. to Peters**

J. B. Marsh's house, at northeast corner of entrance to lean-to; iron post stamped "34"-----	34.055
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**From Patterson northwest along Southern Pacific R. R. to Tracy**

	Feet
Patterson, 3.3 miles north of, east of track, 5 feet north of telegraph milepost 104; iron post stamped "111 Cal 1909 G"-----	110.461
Westley, 200 feet east of, front of station; iron post stamped "86 Cal 1909 G"-----	85.794
Westley, 3.3 miles northwest of, 25 feet east of track, 5 feet south of milepost 98; iron post stamped "85 Cal 1909 G"-----	85.170
Westley, 6.3 miles northwest of, 25 feet east of track, 5 feet south of telegraph milepost 94; iron post stamped "100 Cal 1909 G"-----	99.402
Westley, 9.3 miles northwest of, 25 feet east of track, 10 feet north of telegraph milepost 91; iron post stamped "100 Cal 1909 G"-----	99.306
Westley, 12.3 miles northwest of, 25 feet east of track, 10 feet south of telegraph milepost 88; iron post stamped "75 Cal 1909 G"-----	74.720
Westley, 15.3 miles northwest of, at Southern Pacific R. R. and Western Pacific R. R. crossing; top of rail, marked "78"-----	77.5
Westley, 15.3 miles northwest of, 75 feet east of Southern Pacific R. R. 100 feet north of Western Pacific R. R. at crossing, 10 feet south of milepost 85; iron post stamped "78 Cal 1909 G"-----	77.584

**From Stockton west along Atchison, Topeka & Santa Fe Ry. to Tule switch**

Stockton, in front of station; top of north rail-----	18.2
Stockton, 5.8 miles west of, 200 feet east of milepost 1127, where levee joins railroad embankment, on levee at fence corner; iron post stamped "1907 9 B 1"-----	9.205
Holt, 180 feet north of station, at edge of right of way, on fence line; iron post stamped "2 1907 B 2"-----	2.321

**CARBONA QUADRANGLE, COMPRISING LONE TREE CREEK, ROMAIN, TRACY,  
AND VERNALIS 7½' QUADRANGLES**

[Latitude 37° 30'-37° 45'; longitude 121° 15'-121° 30']

**SAN JOAQUIN AND STANISLAUS COUNTIES**

Primary leveling by L. F. Biggs in 1910

**From point 1 mile west of Ellis south and east to San Joaquin bridge, thence northwest to Banta**

	Feet
Ellis, 2 miles south of, at Western Pacific R. R. crossing; spike in base of telephone pole, aluminum tag stamped "168"-----	168.52
T. 3 S., R. 5 E., corner of secs. 4, 5, 8, and 9, 2.5 miles south by 1 mile west of Tracy, at Western Pacific R. R. crossing; iron post stamped "148, 1910, 5"-----	148.671
Tracy, 3.5 miles south by 1 mile west of, 2 miles south of Jefferson School, at railroad crossing; spike in base of telephone pole, aluminum tag stamped "199"-----	199.29
Tracy, 4.5 miles south by 1 mile east of, T. 3 S., R. 5 E., corner of secs. 14, 15, 22, and 23, at crossroads; iron post stamped "140, 1910, 6"-----	139.928
San Joaquin bridge, 4 miles west of, at Southern Pacific R. R. crossing; spike in base of telephone pole, aluminum tag stamped "83"-----	83.44
San Joaquin bridge, 0.5 mile west of, at T road; iron post stamped "45, 1910, 7"-----	47.455

	Feet
San Joaquin bridge, 1 mile northwest of, east side of road, at second-class road east; spike in base of telephone pole, aluminum tag stamped "41"-----	43.54
San Joaquin bridge, 2 miles northwest of, opposite T road west; spike in base of telephone pole, scribed and painted "33"-----	35.67
San Joaquin bridge, 4 miles northwest of, 5 miles southeast of Banta, east side of road, opposite power pole 19-2; iron post stamped "37, 1910, 8"-----	39.577
Banta, 3.7 miles southeast of, at crossroads; spike in base of telephone pole, aluminum tag stamped "31"-----	33.49
Banta, 2.5 miles southeast of, opposite second-class road west; spike in base of telephone pole, aluminum tag stamped "23"-----	24.83
Banta, 1.9 miles southeast of, at Western Pacific R. R. crossing; spike in base of telephone pole, marked "19"-----	21.10
Banta, 1 mile southeast of, at T road east; spike in base of telephone pole, aluminum tag stamped "18"-----	20.46
<b>From point 1 mile west of Ellis east to Tracy</b>	
Ellis, 1 mile west of, 4 feet north of milepost 68; iron post stamped "102.656 B" (U. S. C. & G. S. b. m. P <sub>s</sub> )-----	102.962
Tracy, 2 miles west of, at road crossing; spike in base of telephone pole, aluminum tag stamped "67"-----	67.27
Tracy, 1 mile west of; spike in base of milepost 70, aluminum tag stamped "65"-----	65.02
Tracy, 0.4 mile north of station, 4 feet north of milepost 72, on fence line north side of track; iron post stamped "54, 1910, 8" (U. S. C. & G. S. b. m.)-----	54.150
<b>From point 3 miles west of Banta south to Tracy</b>	
Banta, 3 miles west of, at T road south to Tracy; spike in base of telephone pole 40-12; aluminum tag stamped "27"-----	27.60
<b>Primary leveling by W. H. Monahan in 1909 and D. S. Birkett in 1913</b>	
<b>From point 6.3 miles northwest of Westley northwest along Southern Pacific R. R. to Tracy</b>	
Westley, 7.3 miles northwest of, 25 feet east of track, 100 feet north of telegraph milepost 94; spike in fence post, aluminum tag stamped "104"-----	103.96
Westley, 8.3 miles northwest of, 25 feet east of track, 100 feet north of telegraph milepost 95; spike in fence post, aluminum tag stamped "101"-----	100.67
Westley, 9.3 miles northwest of, 25 feet east of track, 10 feet north of telegraph milepost 92; iron post stamped "100 G Cal 1909"-----	99.368
Westley, 10.3 miles northwest of, 10 feet east of track, 75 feet west of milepost 91; spike in whistle signpost, aluminum tag stamped "94"-----	94.03
Westley, 11.3 miles northwest of, 10 feet north of telegraph milepost 90, on east side of track; spike in fence post, aluminum tag stamped "79"-----	79.042
Westley, 12.3 miles northwest of, 25 feet east of track, 10 feet south of telegraph milepost 89; iron post stamped "75 G 1909 Cal"-----	74.780

	Feet
Westley, 13.2 miles northwest of, on east side of track, 200 feet south of milepost 88; spike in whistle post, aluminum tag stamped "77"-----	76.5
Westley, 14.3 miles northwest of, 25 feet east of track, 20 feet north of milepost 87; spike in fence post, aluminum tag stamped "80"---	79.1
Westley, 15.3 miles northwest of, at Southern Pacific and Western Pacific crossing; top of rail, marked "78"-----	77.6
Westley, 15.3 miles northwest of, 75 feet east of Southern Pacific R. R. track and 100 feet north of Western Pacific R. R. track where these railroads cross, 10 feet south of milepost 86; iron post stamped "78 G 1909 Cal"-----	77.709
Westley, 16.3 miles northwest of, 40 feet east of track; spike in telegraph milepost 85, aluminum tag stamped "70"-----	69.685

Precise leveling by the U. S. Coast and Geodetic Survey in 1910-11

Near Tracy

Banta, opposite milepole 74 on Southern Pacific R. R. right of way, 250 meters east of Southern Pacific station; Geological Survey iron post stamped "22.121" (U. S. C. & G. S. b. m. T-8)-----	22.477
Tracy, about 0.3 mile east of Southern Pacific R. R. station, 2 meters north of milepole 71, 0.3 meter south of line fence, on right of way of Southern Pacific R. R.; Geological Survey iron post stamped "53.927" (U. S. C. & G. S. b. m. S-8)-----	54.150
Tracy, 150 meters east of Southern Pacific R. R. station, in top surface of southwest concrete pillar under water tank; red metal disk (U. S. C. & G. S. b. m. R-8)-----	60.177
Tracy, 75 meters west of Southern Pacific R. R. station, in north face of northwest concrete pillar under water tank; red metal disk (U. S. C. & G. S. b. m. Q-8)-----	59.147
Tracy, 10 meters along the track east of milepole 68, on Southern Pacific R. R. right of way, 1 meter from south line fence, about 1 meter below track; Geological Survey iron post stamped "102.656" (U. S. C. & G. S. C. b. m. P-8)-----	102.962

Primary leveling by L. F. Biggs in 1919

From point 2.5 miles south of Tracy northwest along Southern Pacific R. R. to Tracy (leveled several times)

Tracy, 2.5 miles southeast of, 100 feet north of Northern Pacific Ry. crossing; iron post stamped "78 Cal 1909 C"-----	77.579
Highway milepost 84 (formerly 85); spike, marked "U. S. 70 B. M." (Monahan b. m.)-----	69.55
Tracy, about 0.3 mile east of Southern Pacific R. R. station, 2 meters north of milepost 71, 0.3 meter south of line fence on right of way of Southern Pacific R. R.; iron post stamped "53.927" (U. S. C. & G. S. b. m. S-8)-----	54.150
Tracy, 150 meters east of Southern Pacific R. R. station, in top surface of southwest concrete pillar under water tank; disk (U. S. C. & G. S. b. m. R-8)-----	60.177
Tracy, 75 meters west of Southern Pacific R. R. station, in north face of northwest west concrete pillar under water tank; disk (U. S. C. & G. S. b. m. Q-8)-----	59.147

## From Tracy northwest along Southern Pacific R. R. to Bethany

	Feet
Tracy, 1.5 miles northwest of, east side of highway, south end of concrete highway culvert 80 B. C. at railroad crossing; chiseled square, marked "U. S. 40"-----	40. 25
<b>Primary leveling by L. F. Biggs in 1919</b>	
<b>Along highways in southern part of quadrangles</b>	
T. 3 S., Rs. 5 and 6 E., corner of secs. 25, 36, 30, and 31, east side of road, at road east, in corner fence post; spike, marked "U. S. 204"---	204. 10
T. 3 S., Rs. 5 and 6 E., corner of secs. 24, 25, 19, and 30, east side of road, at road east, in gatepost; spike painted "U. S. 138"-----	137. 25
T. 3 S., Rs. 5 and 6 E., corner of secs. 13, 24, 18, and 19, at crossroads, in corner fence post; spike, painted "U. S. 102"-----	101. 48
T. 3 S., R. 5 E., corner of secs. 14, 23, 13, and 24, in corner fence post; spike, painted "U. S. 112"-----	112. 13
Tracy, 4.5 miles south by 1.5 miles east of, at crossroads; iron post stamped "140 1910 6"-----	139. 928
Ripon, 7 miles due west of, at T end of road, 12 feet east of fence corner, at southeast corner of intersection; iron post stamped "23 1912"-----	23. 668
Ripon, 7 miles west by 1.2 miles south of, 2.6 miles south of Rustis School, left of gate at entrance to McMullen's upper ranch house; spike in base of post, scribed "U. S. 25 B. M."-----	25. 20
Ripon, 7 miles west by 2 miles south of, northeast corner of wooden abutment of approach to bridge over ravine; spike, scribed "U. S. 30 B. M."-----	30. 53
San Joaquin bridge, 1.6 miles northeast of, first wooden bridge north of; spike in wooden support, scribed "U. S. 31 B. M."-----	31. 33
San Joaquin bridge, 1.3 miles northeast of, 7 miles west by 4 miles south of Ripon, southeast corner of steel bridge over Red Bridge Slough, in concrete abutment; aluminum tablet stamped "30 1912"-----	30. 761
San Joaquin City, near, at northwest corner of steel bridge over San Joaquin River, in end of cap; spike, scribed "U. S. 34 B. M."-----	33. 97
Elevation of floor of bridge-----	35. 7

## Primary leveling by L. F. Biggs in 1919

## Near Hospital Canyon

Hospital Canyon, 2.4 miles west of mouth, south of road, at point just above inclining of canyon; iron post stamped "489 1919 B 11"-----	488. 584
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## Near Ingram Canyon

T. 5 S., R. 6 E., sec. 9, Ingram Canyon, 50 feet west of mouth of Spring Canyon; iron post stamped "671 B 1919 B 9"-----	670. 951
Ingram Canyon, 1 mile northwest of mouth of Spring Canyon, northeast of road, in root of 24-inch oak tree scribed "U. S. 813"; nail-----	813. 01
Ingram Canyon, 1.7 miles northwest of Spring Canyon, 50 feet north of road forks; summit of boulder, chiseled "U. S. 876"-----	875. 92

CROWS LANDING QUADRANGLE

[Latitude 37° 22' 30"-37° 30'; longitude 121°-121° 07' 30"]

STANISLAUS COUNTY

Primary leveling by U. S. Corps of Engineers in San Joaquin Valley in 1913-14

	Feet
T. 6 S., R. 9 E., about 1,600 feet west of northeast corner of sec. 17, 60 feet northeast of bank of river, about 900 feet above mouth of Orestimba Creek, at beginning of curve of levee to right facing downstream, 1.5-foot blazed white-oak tree bears S. 86° W. 102 feet; 2-foot blazed white oak bears S. 61° E. 8 feet; 3-foot blazed white oak bears N. 30° E. 275 feet; iron post set in concrete (U. S. C. E. b. m. 412) -----	60.96
Crows Landing bridge, at retaining wall at west end of, on upstream side, between bridge tender's house and roadway; iron post set in concrete (U. S. C. E. b. m. 413) -----	62.57
Crows Landing bridge, 1,300 feet northwest of branch in road which is 500 feet northeast of, 18.5 feet southwest of fence line along road, 150 feet northeast of river bottom bank, about 1,000 feet northwest of southeast corner of sec. 6, T. 6 S., R. 9 E.; iron post set in concrete (U. S. C. E. b. m. 414) -----	58.59
Crows Landing bridge, 1.1 miles northwest of, 1,300 feet southwest of first bend in road on east side of river after it leaves main Crows Landing Road, on northeast bank of slough, about 1,600 feet north of its inlet, 650 feet north of sharp bend of east bank of slough; iron post set in concrete (U. S. C. E. b. m. 415) -----	56.45
T. 5 S., R. 9 E., about 2,200 feet north and 600 feet east of southwest corner of sec. 21, 700 feet southeast of house, 200 feet west of west fence line of road on bank of river bottom, 30 feet north of 4-foot blazed oak tree; iron post set in concrete (U. S. C. E. b. m. 416) -----	56.17
T. 5 S., R. 8 E., 2,000 feet west and 1,000 feet north of southeast corner of sec. 25, 200 feet northeast of river bank, 3-foot blazed white oak bears S. 40° W. 75 feet; another 3-foot blazed white oak bears S. 40° E. 100 feet; 600 feet east of house; iron post set in concrete (U. S. C. E. b. m. 417) -----	54.89
T. 5 S., R. 8 E., about 700 feet south and 150 feet west of northeast corner of sec. 26, 100 feet east of river bank, 1,000 feet upstream from outlet near lagoon, 500 feet downstream from mouth of wide slough, tree bears W. 25 feet, another tree bears S. 34° E. 95 feet; iron post set in concrete (U. S. C. E. b. m. 418) -----	52.00
Patterson, 3.5 miles east of, 1.1 miles above Patterson pump, 2,600 feet south and 300 feet west of northeast corner of sec. 22, T. 5 S., R. 8 E., 140 feet east of east river bank, about 400 feet south of house, a tree bears N. 5° E. 170 feet, another tree is W. 30 feet, another S. 25° E. 50 feet; iron post set in concrete (U. S. C. E. b. m. 419) -----	51.06
Patterson pump, 75 feet north of west corner of pump house; iron post set in concrete (U. S. C. E. b. m. 420) -----	54.74

## GILROY HOT SPRINGS QUADRANGLE

[Latitude 37°-37° 15'; longitude 121° 15'-121° 30']

## SANTA CLARA AND STANISLAUS COUNTIES

Primary leveling by L. F. Biggs in 1917

From south border of quadrangle along highways across southeast quarter of quadrangle

	Feet
Bell station, 4.7 miles southwest of, west edge of road, at angle in road; iron post stamped "285 1917 3"-----	285.204
Bell station, 3.3 miles southwest of, north edge of road, in base of 42-inch oak tree scribed "U. S. 295"; copper nail-----	295.03
Bell station, 2.3 miles southwest of, south side of road, in base of 30-inch oak tree scribed "U. S. 319"; railroad spike (Highway b. m. 319.49)-----	318.96
Bell station, 0.9 mile southwest of, east of creek, north of road; copper nail in base of 24-inch sycamore tree scribed "U. S. 331"---	331.87
Bell station, 100 feet east of hotel, north edge of road; iron post stamped "352 4 1917"-----	352.123
Bell station, 1.3 miles northeast of, north edge of road, in base of 42-inch oak tree scribed "U. S. 379"; railroad spike-----	379.72
Bell station, 2.3 miles northeast of, west edge of road near foot of grade, in base of 30-inch oak tree scribed "U. S. 431"; nail-----	431.43
Bell station, 3.8 miles northeast of, east side of road, in base of 18-inch white-oak tree scribed "U. S. 696"; copper nail-----	697.07
Bell station, 5 miles northeast of, 3.8 miles southwest of Pacheco Pass, 30 feet north of road, under live-oak tree; iron post stamped "978 5 1917"-----	979.049
Pacheco Pass, 2.3 miles southwest of, south edge of road near creek crossing, in base of 18-inch live-oak tree scribed "U. S. 1,082"; copper nail-----	1,082.74
Pacheco Pass, 1.2 miles southwest of, south edge of road at stream crossing, in base of 24-inch oak tree scribed "U. S. 1,180"; nail--	1,180.41
<b>From point east of Gilroy north along highways to Gilroy Hot Springs (leveled twice)</b>	
Gilroy, 5.4 miles east of, west edge of road near foot of grade, in base of 24-inch sycamore tree scribed "U. S. 290"; copper nail-----	290.37
Gilroy, 7.4 miles east of, 500 feet north of ranch house, near corner of picket fence; top of rock, "U. S. 739" marked on picket fence--	739.08
Gilroy, 8.4 miles east of, 1 mile east of ranch house, north edge of road at top of first summit; aluminum tablet in boulder, stamped "1,088 11 1917"-----	1,088.020
Gilroy, 9.5 miles east of, 6.8 miles south of Gilroy Hot Springs, west of road, in base of frame of water tank, painted "U. S. 1,062"; copper nail-----	1,062.18
Gilroy Hot Springs, 5.7 miles south of, south edge of road at T road north; iron post stamped "984 12 1917"-----	983.643
Gilroy Hot Springs, 4.9 miles south of, east side of road, in base of 18-inch white-oak tree scribed "U. S. 961"; copper nail-----	960.93
Gilroy Hot Springs, 4 miles south of, at north end of small valley, east side of road, in base of 30-inch black-oak tree scribed "U. S. 872"; copper nail-----	871.55

	Feet
Gilroy Hot Springs, 3.5 miles south of, top of railing on west edge of bridge; copper nail and washer, painted "U. S. 840"-----	839.62
Gilroy Hot Springs, 3 miles south of, west edge of road, opposite gate to road leading up Hunting Hollow; iron post stamped "852 1917 13"-----	852.019
Gilroy Hot Springs, 1.6 miles south of, west end of culvert; copper nail, painted "U. S. 887"-----	886.56
Gilroy Hot Springs, 0.6 mile south of, east end of north concrete abutment of highway bridge; chiseled square, marked "U. S. 932"-----	932.29
Gilroy Hot Springs, 50 feet northwest of hotel, in base of 18-inch locust tree; copper nail, aluminum tag stamped "1189"-----	1,191.81
Gilroy Hot Springs, 500 feet southeast of hotel, 60 feet east of road, in top of rock ledge; aluminum tablet stamped "1,133 1918"-----	1,132.800
<b>From point 3 miles south of Gilroy Hot Springs northeast along highways to Batcher triangulation station (leveled twice)</b>	
Batcher triangulation station, 2.5 miles southeast of, 400 feet north of windmill on Melias place, at corner of corral, in base of 24-inch oak tree scribed "U. S. 898"; copper nail-----	397.39
Point on rock under tree-----	1,997.16
Batcher triangulation station; aluminum tablet stamped "2,651"---	2,650.880

## HOLT, LATHROP, STOCKTON, AND UNION ISLAND QUADRANGLES

[Latitude 37° 45'-38°; longitude 121° 15'-121° 30']

## SAN JOAQUIN COUNTY

Primary leveling by L. F. Biggs in 1910

	Feet
<b>From Banta west and north to Grant Line bridge, thence southwest to point 0.8 mile south of pump house</b>	
Banta, 1 mile west of, north side of road, in base of telephone pole 42-9; spike with aluminum tag stamped "31"-----	31.73
Banta, 1.5 miles west of, at T road south, in base of telephone pole 41-29; spike with aluminum tag stamped "33"-----	33.44
Banta, 3 miles west of, at T road south to Tracy, in base of telephone pole 40-12; spike with aluminum tag stamped "27"-----	27.72
Banta, 3.5 miles west of, at T road north; in base of telephone pole 39-31; spike with aluminum tag stamped "27"-----	27.31
Tracy, 2 miles north of, 600 feet north of Bagley's ranch house, east of road, at fence corner; iron post stamped "9, 1910, 1"-----	9.871
T. 1 S., R. 5 E., corner of secs. 5, 9, 4, and 8, in base of post; spike with aluminum tag stamped "5"-----	5.51
Tracy, 3.5 miles north of, 1 mile south of Naylee School, where road turns north, in root of poplar tree; copper nail with aluminum tag stamped "7"-----	7.29
Tracy, 4.5 miles north of, 50 feet north of Naylee School, 200 feet south of Old River steel bridge, west side of road; iron post stamped "11, 1910, 2"-----	11.849
Grant Line steel bridge, on southeast corner of abutment; chisel point, painted "18"-----	18.43
Grant Line steel bridge; 22.5-foot mark on gage-----	14.81

	Feet
Grant Line steel bridge, 2.5 miles west of, 175 feet south of levee, 150 feet south of pump house, on fence line; iron post stamped "2, 1910, 3"-----	2. 124
<b>From Grant Line bridge north and east to Stockton</b>	
Grant Line bridge, 2.5 miles north of, south side of road, where road crosses levee; iron post stamped "2, 1910, 10"-----	1. 889
Grant Line bridge, 2 miles north by 1 mile east of, north side of road; spike in base of corner fence post, aluminum tag stamped "3"-----	3. 32
Bridge over Middle River, 200 feet east of, at T road north; iron post stamped "6, 1910, 11"-----	6. 003
Middle River; surface of water under bridge November 2, 1910----	0. 54
Middle River bridge, 2.3 miles east of, 0.6 mile south of Fairchild School, at T road south; spike in base of telephone pole, marked "6"-----	6. 18
Fairchild School, 1.2 miles north of, 2.5 miles southwest of San Joaquin bridge, opposite road house; iron post stamped "2, 1910"-----	1. 860
San Joaquin River; surface of water under bridge November 2, 1910-----	0. 5
Ganwood Bridge over San Joaquin River, 60 feet east of, north side of road, at fence line; iron post stamped "7, 1910"-----	7. 556
Stockton, 2 miles south of, at junction of French Camp and Roberts Island roads, west levee of canal; spike in base of telephone pole, aluminum tag stamped "16"-----	15. 77
Stockton, south edge of town, junction of South Center and East Jackson streets; spike in base of telephone pole, aluminum tag stamped "13"-----	12.86
Stockton, San Joaquin County courthouse, west door of north entrance, in angle of wall; bronze tablet stamped "18 B"-----	18. 353
<b>From Holt along road north to Black Slough landing (unchecked spur line)</b>	
Holt, 300 feet west of station, south edge of right of way, east edge of road leading south; iron post stamped "10, 1910, 15"-----	10. 335
Black Slough landing, south of, southwest corner of bridge over canal; top of bolt, painted "--3" (below sea level)-----	-1. 00
Black Slough landing, 90 feet northeast of Gorden's house, on edge of levee, San Joaquin River; brass-capped pipe marked "U. S. E. D. No. 206"-----	11. 727
<b>From Middle River west and north along road to Holt</b>	
Kingston School, 300 feet northeast of building, at angle of road to north, west side of road at fence line; iron post stamped "7, 1910, 14"-----	6. 822
Stockton, 5.8 miles west of, 200 feet east of milepost 1127, on levee, at fence corner; iron post stamped "9"-----	9. 205
<b>From point 1.5 miles north of Stockton west to U. S. Corps of Engineers<sup>1</sup> bench mark 0.2 mile east of Shipyard Island (checked spur line)</b>	
Stockton, 1.5 miles north of, 8 feet north of milepost 94, east side of track, near fence line; iron post stamped "20 B" U. S. C. of E. value 23.388-----	20. 575

<sup>1</sup> Locally known as U. S. Engineer Department.

	Feet
Stockton, 2 miles north of, southwest abutment of bridge over Calaveras River; top of bolthead, marked "27"-----	27.31
Western Pacific R. R. crossing; top of rail-----	29.0
Stockton, 2 miles north of, on lower Sacramento road, 6 feet south of southeast abutment of bridge over Calaveras River; copper bolt in cap with aluminum tag stamped "19"-----	19.862
Lower Sacramento road bridge, 1.2 miles west of, north levee of canal, 200 feet southwest of fence corner, in stump; copper nail with aluminum tag stamped "20"-----	20.790
Lower Sacramento road bridge, 2.5 miles west of, north edge of levee, at northeast corner of house at Smith's place; iron post stamped "3"-----	3.872
Smith's house, 1 mile west of; spike in base of power pole 5-15, aluminum tag stamped "-1" (below sea level)-----	-0.646
Elmwood farm No. 2, 800 feet east of barn; spike in base of power pole 6-7, aluminum tag stamped "2"-----	2.183
Shipyard Island, 0.5 mile east of, east bank of San Joaquin River, at pumping station, in top of a pile; copper bolt with aluminum tag stamped "8"-----	8.807
Shipyard Island, 0.2 mile east of, right bank of San Joaquin River, 40 feet back of levee, midway between house and barn; iron post marked "U. S. E. D. No. 205" (U. S. C. E. value 4.770)-----	1.496

**From point 2.5 miles north of Grant Line bridge to Camp No. 1 landing**

Banta, 10 feet north of milepost 75, south side of track; iron post stamped "22.181" (recovered by U. S. Coast and Geodetic Survey)-----	22.477
Victoria Island, 0.5 mile east of, 40 feet south of Middle River levee, 5 feet south of red tank house; iron post stamped "4, 1910, 17"-----	4.662
Camp No. 1 landing, on top of levee, 50 feet north of barn, in top of snubbing post; copper nail with aluminum tag stamped "16"-----	16.76

**From point 2.3 miles east of Middle River southeast to French Camp**

Brant bridge, south end abutment of, aluminum tablet stamped "21 1910, 30"-----	21.039
Brant bridge, 1.2 miles east of, at T road south, in telephone pole; spike with aluminum tag stamped "11"-----	11.32
French Camp, 1.3 miles south of, east side of road at T road west, in base of locust tree; spike with aluminum tag stamped "18"-----	17.67
French Camp, 2.1 miles south of, on east side of railroad at road crossing, 200 feet south of milepost 85; iron post stamped "19 B 1901"-----	19.371

**Precise leveling by U. S. Coast and Geodetic Survey**

**Near Lathrop**

Lathrop, 40 meters south along the track from Southern Pacific R. R. milepole 84, 0.6 meter south of north highway fence at crossing, 11.5 meters east of Southern Pacific northbound track; Geological Survey iron post stamped "19 B" (U. S. C. & G. S. b. m. Y-8)-----	19.357
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	Feet
Lathrop, 100 meters north of Southern Pacific R. R. station, in south-east pillar of water tank; red metal disk (U. S. C. & G. S. b. m. X-8) -----	22. 539
Lathrop, about 75 meters north of Southern Pacific R. R. station, west of tracks, at fence line, 15 meters south of water tank; Geological Survey iron post stamped "20 B" (U. S. C. & G. S. b. m. W-8) -----	20. 321
Lathrop, at railroad mileage 78.1, at west end of viaduct leading to west end of Southern Pacific R. R. bridge 78 B over San Joaquin River, on the top surface of the bearing stone of northwest pier, about 1.8 meters below top of rail; red metal disk (U. S. C. & G. S. b. m. V-8) -----	27. 215
Banta, 1 mile northeast of, in top surface of east abutment to Southern Pacific R. R. bridge 74C, south of the track; red metal disk (U. S. C. & G. S. b. m. U-8) -----	20. 492

Primary leveling by L. F. Biggs in 1919

From Tracy northwest along Southern Pacific R. R.

Tracy, 4 miles northwest of, at angle in highway westward to Altamont Pass; west end of concrete highway culvert; chiseled "U. S. 27" -----	27. 52
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HOWARD RANCH QUADRANGLE

[Latitude 37° 07' 30''-37° 15'; longitude 121°-121° 07' 30'']

MERCED COUNTY

Primary leveling by Roscoe Reeves in 1916

From point near Gustine along highways west and south to south border of quadrangle

	Feet
Gustine, 2 miles south of, 1 mile west of railroad crossing, 100 feet northwest of bridge over canal, in telephone pole; spike, painted "111" -----	111. 85
Gustine, 2 miles south of, T. 8 S., R. 9 E., southwest corner of sec. 17, 1,500 feet east of crossroads, 75 feet west of canal, on north side of road, inside of fence; iron post stamped "111" -----	111. 318
Gustine, T. 8 S., R. 9 E., southeast corner of sec. 18, northwest corner of crossroads, in telephone pole; spike painted "113" -----	113. 81
T. 8 S., R. 8 E., at northeast corner of sec. 24, 100 feet south of T road east, on west side of road, in telephone pole; spike, painted "128" -----	128. 06
T. 8 S., R. 8 E., northeast corner of S. E. ¼ sec. 24, at southwest corner of T road west, in fence post; spike, painted "131" -----	131. 25
T. 8 S., R. 8 E., northwest corner of S. W. ¼ sec. 24, in corner fence post; spike, painted "145" -----	145. 87
T. 8 S., R. 8 E., 150 feet south of southeast corner of N. E. ¼ sec. 22, west side of road, in gate post; spike, painted "165" -----	165. 25
T. 8 S., R. 8 E., 150 feet south of quarter corner on east side of sec. 22, 3 feet south of gatepost on west side of road; iron post stamped "165" -----	165. 991
T. 8 S., R. 8 E., southeast corner of sec. 27, in northwest corner of crossroads, in telephone pole; spike, painted "170" -----	170. 29
T. 8 S., R. 8 E., southwest corner of sec. 35, in northeast corner of L road north and east, in fence post; spike, painted "190" -----	190. 49

	Feet
T. 9 S., R. 8 E., 5 telephone poles north of center of sec. 2, in pole 87-11; spike, painted "173"-----	173.73
T. 9 S., R. 8 E., 500 feet south of center of sec. 2, in corner fence post; spike, painted "161"-----	161.56
T. 9 S., R. 8 E., quarter corner on east side of sec. 2, 20 feet north of ditch, east side of road; iron post stamped "146"-----	146.745
T. 9 S., R. 8 E., 0.05 mile north of quarter corner between secs. 10 and 11, in bottom of draw, in fence post; spike, painted "247"-----	247.43
Howard ranch, in gate post to main entrance from road; spike, painted "285"-----	285.46
T. 9 S., R. 8 E., NW. ¼ sec. 15, at entrance gate, from the east to Howard ranch buildings, 15 feet east of gate; iron post stamped "285"-----	284.998
Howard ranch, 0.8 mile southwest of, on road to the San Luis ranch, at forks of road, in north gate post; spike, painted "317"-----	317.45
Howard ranch, 1.6 miles southwest of, east side of road; point of rock, painted "316"-----	316.29

**MANTECA QUADRANGLE**

[Latitude 37° 45'-37° 52' 30"; longitude 121° 07' 30"-121° 15']

**SAN JOAQUIN COUNTY**

Primary leveling by G. L. Hagman in 1911

From French Camp to Castle School

	Feet
French Camp, 2.1 miles southeast of, at T road south, 50 feet southeast of, in base of telephone pole; spike, aluminum tag stamped "26.66"-----	26.18
French Camp, 3.2 miles southeast of, northeast corner of crossroads; iron post stamped "32 B 1911"-----	32.710
French Camp, 4.2 miles southeast of, on south side of road, 150 feet west of Castle ranch, in base of telephone pole; spike, aluminum tag stamped "36.67"-----	36.25
Castle School, 0.6 mile southeast of, southeast corner of crossroads, in base of telephone pole; spike, aluminum tag stamped "41.68"-----	41.37
Castle School, 1.6 miles northeast of, on west side of road, in base of fence post; spike, aluminum tag stamped "40.69"-----	40.20
Castle School, 2.1 miles northeast of, at private T road east to Lynch ranch, on west side of road, 8 feet south of gatepost; iron post stamped "42 B 1911"-----	42.059

**Near Ripon**

Ripon, 4.6 miles north of, 0.5 mile west of Atlanta, southwest corner of road forks; iron post stamped "59 B 1911"-----	58.377
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**MORGAN HILL QUADRANGLE**

[Latitude 37°-37° 15'; longitude 121° 30'-121° 45']

**SANTA CLARA COUNTY**

Precise leveling by U. S. Coast and Geodetic Survey

Along Southern Pacific R. R.

	Feet
Coyote, 3 miles south of, 30 feet east of milepost 66, west of road, 150 feet north of railroad crossing; G. S. iron post stamped "S. F. 300 1908 6" (U. S. C. & G. S. b. m. Q-19)-----	300.784

	Feet
Coyote, 6 miles south of, east of track, 20 feet east of milepost 69, 100 feet west of Madrone post office; G. S. iron post stamped "S. F. 344 1908 7" (U. S. C. & G. S. b. m. H-20)-----	344. 127
Morgan Hill, 1.0 mile south of, set in south end of Southern Pacific R. R. culvert 69 D, on west side of track; red metal disk (U. S. C. & G. S. b. m. R-19)-----	350. 970
Morgan Hill, 1.3 miles south of, east of track, 10 feet south of milepost 72; G. S. iron post stamped "S. F. 332 1908 8" (U. S. C. & G. S. b. m. S-19)-----	332. 670
San Martin, 0.7 mile north of, mileage 73.9, 15 meters west of track, on highway bridge, in top face of south end post of railing on east side of roadway; red metal disk (U. S. C. & G. S. b. m. T-19)-----	312. 693
Morgan Hill, 4.3 miles south of, 10 feet east of milepost 75, 500 feet east of Martin School building; G. S. iron post stamped "S. F. 280 1908 9" (U. S. C. & G. S. b. m. U-19)-----	279. 803
San Martin, 2 miles south of, at mileage 76.6, on east end of Southern Pacific R. R. culvert 76 C, on east side of track; red metal disk (U. S. C. & G. S. b. m. V-19)-----	248. 592
Gilroy, 2.8 miles north of, at mileage 77.9, 6 feet south of milepost 78, 50 feet south of private-road crossing; iron post stamped "S. F. 224 1908 10" (U. S. C. & G. S. b. m. W-19)-----	224. 603
Gilroy, at north edge of town, at mileage 79.8, set in north end of east banister of highway culvert, bridge is about 60 meters west of track, opposite railroad wood trestle; red metal disk (U. S. C. & G. S. b. m. X-19)-----	200. 879

Primary leveling by B. A. Jenkins in 1908

From milepost 61, near Pomar, southeast along Southern Pacific R. R. to Gilroy

San Jose, 12.5 miles south of, 0.2 mile north of Coyote, 150 feet south of road crossing, opposite milepost 63, west of track; iron post stamped "S. F. 253 1908 5" (U. S. C. & G. S. b. m. O 19)-----	253. 520
Coyote, in front of station; top of rail-----	254. 9
Coyote, 3 miles south of, 30 feet east of milepost 66, west of road, 150 feet north of railroad crossing; iron post stamped "S. F. 300 1908 6" (U. S. C. & G. S. b. m. Q 19)-----	300. 784
Coyote, 6 miles south of, east of track, 20 feet east of milepost 69, 100 feet west of Madrone post office; iron post stamped "S. F. 344 1908 7" (U. S. C. & G. S. b. m. H 20)-----	344. 127
Madrone, in front of station; top of rail-----	347. 8
Morgan Hill, in front of station; top of rail-----	348. 5
Morgan Hill, 1.3 miles south of, east of track, 10 feet south of milepost 72; iron post stamped "S. F. 332 1908 8" (U. S. C. & G. S. b. m. S 19)-----	332. 670
Tennant, in front of station; top of rail-----	331. 3
San Martin, in front of station; top of rail-----	287. 9
Morgan Hill, 4.3 miles south of, east of road, 10 feet east of milepost 75, 500 feet south of Martin School building; iron post stamped "S. F. 280 1908 9" (U. S. C. & G. S. b. m. V 19)-----	279. 803
Rucker, in front of station; top of rail-----	242. 3
Gilroy, 2.8 miles north of, 6 feet south of milepost 78, 50 feet south of private-road crossing; iron post stamped "S. F. 224 1908 10" (U. S. C. & G. S. b. m. W 19)-----	224. 603

	Feet
Gilroy, in southeast corner of city hall; aluminum tablet stamped "S. F. 190 1908 11"-----	200. 110
Gilroy, 50 feet east of track of Southern Pacific R. R., 472 feet south of station; iron post stamped "S. F. 197 1908 12" (U. S. C. & G. S. b. m. J 20)-----	196. 640
Gilroy, in front of station; top of rail-----	196. 8

Primary leveling by B. A. Jenkins in 1908 and L. F. Biggs in 1917

From point south of Gilroy to Gilroy, correcting data in Bulletin 481

Gilroy, 3.2 miles south of, 80 feet south of milepost 84; iron post stamped "S. F. 167 1908 13" (Bull. 481, p. 68, +0. 315). Recovered by the U. S. C. & G. S. in 1920 as J 20)-----	166. 968
Gilroy, 50 feet east of track of Southern Pacific R. R., 472 feet south of station; iron post stamped "S. F. 197 1908" (U. S. C. & G. S. b. m. S. 20)-----	196. 640
Gilroy, in southeast corner of city hall; aluminum tablet stamped "S. F. 200 1908" (Bull. 481, p. 68, +0. 147)-----	200. 110

Primary leveling by L. F. Biggs in 1917

From Gilroy east to point near southeast corner of quadrangle

Gilroy, in front of city hall, flush with sidewalk; brass plate set in concrete block, stamped (City of Gilroy, b. m. City elev.=198.77)	197. 656
Gilroy, 1.6 miles east of, south edge of road, in base of frame of road tank; copper nail and washer, painted "U. S. 179"-----	179. 17
Gilroy, 3 miles east of, 0.6 mile northeast of old Gilroy, on west side of concrete highway bridge; aluminum tablet stamped "10 1917 171"-----	171. 616
Gilroy, 4 miles east of, at T road north, opposite large water tank, in base of stump scribed "U. S. 197"; copper nail,-----	197. 66

MOUNT BOARDMAN QUADRANGLE

[Latitude 37° 15'-37° 30'; longitude 121° 15'-121° 30']

STANISLAUS COUNTY

Primary leveling by L. F. Biggs in 1919

From Vanormer west along highways near north border of quadrangle

	Feet
Mouth of Del Puerto Canyon, 3.6 miles west of, 40 feet north of road, in sandstone ledge; chiseled "U. S. 418 B. M."-----	418. 20
Mouth of Del Puerto Canyon, 4.8 miles west of, 30 feet south of road, 30 feet north of track; chiseled point on boulder, painted "U. S. 487"-----	487. 01
Mouth of Del Puerto Canyon, 6 miles west of, 2 miles east of Canyon School, 20 feet north of road, at Tryans sheep ranch, in summit of boulder; bronze tablet stamped "548 1919 B B 3"-----	547. 488
Canyon School, 0.9 mile east of, 20 feet north of railroad water tank; summit of boulder chiseled "U. S. 607"-----	607. 02
Canyon School, 60 feet south of, 10 feet north of track; summit of boulder chiseled "U. S. 645"-----	645. 24
Canyon School, about 1.5 miles north of, 15 feet west of trail; summit of small saddle, chiseled "U. S. 1359"-----	1, 359. 13

Canyon School, about 2 miles north of, 30 feet west of trail, in first saddle; chiseled point on rock ledge, painted "1,430"-----	Feet 1,430.04
Summit of main saddle, in trail-----	1,423.9
Summit of saddle between Del Puerto and Ingram Canyons, 0.1 mile north of, 100 feet north of road; in large boulder, painted "U. S. 1,361"-----	1,361.47
Summit of divide between Del Puerto and Ingram Canyons, 0.5 mile north of, 0.4 mile north of Malay ranch house, on summit of small butte; bronze tablet in ledge, stamped "1,254 1919 B B 8"-----	1,254.127
<b>From Canyon School west along highways to Red Mountain (leveled twice)</b>	
Canyon School, 60 feet south of, 10 feet north of track, in summit of boulder; chiseled "U. S. 645"-----	645.24
Canyon School, 1.2 miles west of, 60 feet south of road, in base of 24-inch oak tree scribed "U. S. 698"; nail-----	698.40
The Narrows, south end of west concrete abutment of railroad bridge; bronze tablet stamped "733 1919 B B 4"-----	733.36
Silica siding, south edge of road; summit of boulder, chiseled "U. S. 776"-----	775.69
Silica siding, 1.2 miles west of, south side of track, 200 feet west of railroad crossing; summit of boulder, chiseled "U. S. 936"-----	936.06
Top of rail at road crossing-----	1,006.3
Magnesia, south side of track, at west end of switch, in base of 18-inch oak tree, scribed "U. S. 984"; nail-----	983.69
Magnesia, 1 mile west of, 10 feet south of track, in base of 18-inch oak tree scribed "U. S. 1,029"; spike-----	1,028.66
Magnesia, 2 miles west of, 6 feet south of track, at point, in ledge; bronze tablet stamped "1,075 1919 B B 5"-----	1,075.148
Magnesia, 3 miles west of, 20 feet south of track, opposite Deer Park Canyon, in base of 24-inch oak tree, scribed "U. S. 1,135"; nail-----	1,135.22
Jones Camp, 2.5 miles northeast of, opposite field; south end of iron culvert, painted "U. S. 1,240"-----	1,240.01
Jones Camp, 1.5 miles northeast of, at mouth of Adobe Canyon, south end of trestle, painted "U. S. 1,318"; nail-----	1,319.37
Jones Camp, 0.4 mile northeast of, south edge of track, opposite Hideout Canyon, at ore-loading platform; summit of rock, painted "U. S. 1,518"-----	1,517.92
Jones Camp, north edge of stream, 15 feet south of cook house, in summit of large boulder; bronze tablet stamped "1611 B B 1919 6"-----	1,611.468
Jones Camp, 0.3 mile southwest of, at forks of trail, in base of 24-inch oak tree, scribed "U. S. 1,887"-----	1,887.39
Phoenix Mill, 400 feet west of retort, 400 feet east of office, 20 feet south of road; summit of boulder chiseled "U. S. 2,101"-----	2,100.91
Red Mountain, 1.0 mile southwest of, 0.5 mile west of Phoenix Mill, 200 feet east of trail saddle, 30 feet south of trail, near old prospect hole, in summit of boulder; bronze tablet stamped "2,363 7 B B 1919"-----	2,363.409
Red Mountain, 0.5 mile southwest of, 0.8 mile west of Phoenix Mill, 0.4 mile north of trail saddle on summit of hill, in base of small oak tree with flag, scribed "U. S. 2,925"; spike-----	2,924.83
<b>Near Malaly ranch house</b>	
Malaly ranch house, 0.2 mile west of, on top of ridge, in base of oak tree, painted "U. S. 1142"; spike-----	1,141.60

	Feet
Malaly ranch house, 0.8 mile northwest of, 30 feet north of trail, at top of steep grade, in base of 24-inch oak tree, scribed "U. S. 1,119"; nail-----	1, 118. 98
Malaly ranch house, 1.1 miles northwest of, in Spring Canyon, at junction of trail and road, in base of 24-inch oak tree, scribed "U. S. 816"; nail-----	815. 80

## MOUNT DIABLO QUADRANGLE

[Latitude 37° 45'-38°; longitude 121° 45'-122°]

## CONTRA COSTA COUNTY

Primary leveling by J. A. Vogleson in 1896

	Feet
From Antioch southeast along Southern Pacific R. R. to Neroly siding	
Neroly siding, county road just north of, gate to private-road crossing, first panel east of gate; iron post stamped "79"-----	78. 923
From point near Brentwood west up Marsh Creek to Morgan Territory, thence northwest via Clayton to Concord	
Morgan Territory, in school yard, 55 feet east of northeast corner of schoolhouse; iron post stamped "766"-----	765. 805
Marsh Creek and Mount Diablo Creek, divide between, just east of gate; iron post stamped "955"-----	955. 069
Clayton, intersection of Nortonville and Marsh Creek roads with Main St., near guidepost; iron post stamped "395"-----	395. 105
From boundary of Contra Costa and Alameda counties northwest to Danville	
Danville, south of station; railroad track-----	370. 5
Danville, in brick foundation of schoolhouse; bronze tablet stamped "365"-----	364. 495

## NEW ALMADEN QUADRANGLE

[Latitude 37°-37° 15'; longitude 121° 45'-122°]

## SANTA CLARA AND SANTA CRUZ COUNTIES

Primary leveling by B. A. Jenkins in 1908 and C. C. Wood in 1899

From point 3.6 miles southeast of San Jose to milepost 81

	Feet
San Jose, 9.7 miles southeast of, 800 feet south of milepost 60, 50 feet north of road to Mrs. L. Little's ranch house where it crosses railroad, at west edge of wagon road; iron post stamped "S. F. 199 1908 4" (C. & G. S. b. m. L 19)-----	198. 983
Pomar, in front of station; top of rail-----	205. 3
From point near Zeyante north to point 1 mile north of Los Gatos	
Glenwood, 1.4 miles southwest of, at northwest corner of tunnel 4, in wing; aluminum tablet stamped "S. F. 787 1908 B. O."-----	786. 985
Glenwood, in front of station; top of rail-----	888. 96
Laurel, in front of station; top of rail-----	899. 3
Wrights, 1.4 miles southwest of, at west end of tunnel 2, in wing; aluminum tablet stamped "S. F. 902 1908 31"-----	901. 151
Wrights, 0.2 mile west of station, at northeast end of tunnel 2, in wing; aluminum tablet stamped "S. F. 898 1908 32"-----	897. 847

	Feet
Aldercroft, 300 feet south of, on northeast corner of cement culvert 60-A; chiseled circle painted "U. S. 731 B. M. No. 61"-----	730. 45
Alma, 0.8 mile southwest of, 400 feet south of private-road crossing, west of railroad, in boulder; aluminum tablet stamped "S. F. 621 1908 B. 3" (not found in 1916)-----	620. 944
Alma, 0.6 mile northeast of, opposite Lexington, in cement culvert; aluminum tablet stamped "S. F. 535 1908 34" (not found in 1916)-----	534. 652
Los Gatos, 1.1 miles southwest of, cement culvert; chiseled circle painted "U. S. 428 B. M. No. 64" (not found in 1916)-----	427. 76
Los Gatos, opposite station, in east corner of yard around Hotel Lindon, on Santa Cruz Ave.; iron post stamped "S. F. 412"-----	411. 789

ORESTIMBA QUADRANGLE, COMPRISING CROWS LANDING, NEWMAN, ORES-  
TIMBA CREEK, AND PATTERSON  $7\frac{1}{2}$ ' QUADRANGLES

[Latitude 37° 15'-37° 30'; longitude 121°-121° 15']

MERCED AND STANISLAUS COUNTIES

Primary leveling by W. H. Monahan in 1908

From point 1.4 miles north of Gustine along Southern Pacific R. R. via  
Newman and Crows Landing to Patterson

	Feet
Newman, south end of station, 10 feet west of track, 5 feet east of telegraph pole; iron post stamped "88 Cal 1909 G"-----	87. 757
Newman, in front of station; top of rail, marked "89"-----	88. 3
Newman, 4.4 miles north of, 5 feet north of telegraph milepost 116, 25 feet east of track; iron post stamped "104 Cal 1909 G"-----	103. 574
Crows Landing, 125 feet east of station, 300 feet south of telegraph milepost 114; iron post stamped "111 Cal 1909 G"-----	111. 115
Crows Landing, in front of station; top of rail, marked "111"-----	112. 5
Crows Landing, 3 miles north of, 10 feet north of telegraph milepost 111, 25 feet east of track; iron post stamped "114 Cal 1909 G"-----	113. 281
Patterson, in front of station; top of rail, marked "103"-----	102. 8
Patterson, 25 feet east of track, 5 feet north of telegraph pole with sign reading "Patterson"; iron post stamped "102 Cal 1909 G"-----	101. 870

Primary leveling by W. H. Monahan in 1909 and D. S. Birkett in 1912

Near northeast corner of Crows Landing quadrangle

T. 5 S., R. 8 E., southeast corner of sec. 13, at T in roads, west side of road; spike in base of 1-foot square gatepost, marked "U. S. 55 B. M."-----	55. 14
D. G. Barret house, in front of, south side of road, on top of head gate to irrigation lateral; top of nail in circle of paint; marked "U. S. 62 B. M."-----	62. 59

From point near Newman northwest along Southern Pacific R. R. to point 3.3  
miles northwest of Patterson

Newman, south end of station, 10 feet west of track, 5 feet east of telegraph pole; iron post stamped "88 G 1909 Cal"-----	87. 757
Newman, in front of station; top of rail-----	88. 3

	Feet
Newman, 1.3 miles northwest of, 10 feet south of telegraph milepost 719, on east side of track; spike in fence post, aluminum tag stamped "92" -----	92. 10
Newman, 2.3 miles northwest of, 50 feet north of telegraph milepost 118, on east side of railroad track; spike in fence post, aluminum tag stamped "96" -----	96. 11
Newman, 3.4 miles northwest of, 250 feet north of telegraph milepost 117, on east side of railroad; spike in fence post, aluminum tag stamped "100" -----	99. 52
Newman, 4.4 miles northwest of, 5 feet north of telegraph milepost 116, 25 feet east of track; iron post stamped "104 G 1909 Cal" --	103. 574
Newman, 5.3 miles northwest of, 5 feet east of track, 100 feet southwest of telegraph milepost 115; spike in signpost reading "Crows Landing 1 mile," aluminum tag stamped "107" -----	106. 79
Crows Landing, 125 feet east of station, 300 feet south of telegraph milepost 114; iron post stamped "111 G 1909 Cal" -----	111. 115
Crows Landing, in front of station; top of rail -----	112. 5
Crows Landing, 1 mile northwest of, 100 feet west of milepost 113; spike in base of signpost reading "Crows Landing 1 mile," aluminum tag stamped "109" -----	109. 11
Crows Landing, 2 miles northwest of, 5 feet north of telegraph milepost 112; spike in fence post, aluminum tag stamped "109" -----	109. 14
Crows Landing, 3 miles northwest of, 10 feet north of telegraph milepost 111, 25 feet east of track; iron post stamped "114 G 1909 Cal" -----	113. 281
Crows Landing, 4 miles northwest of, 10 feet west of railroad track, 100 feet west of telegraph milepost 110; spike in base of section post 36, aluminum tag stamped "114" -----	113. 36
Crows Landing, 5 miles northwest of, 25 feet north of telegraph milepost 109, on east side of railroad; spike in fence post, aluminum tag stamped "107" -----	106. 21
Patterson, in front of station; top of rail -----	102. 8
Patterson, 25 feet east of track, 5 feet north of telegraph pole with sign reading "Patterson"; iron post stamped "102 G 1909 Cal" --	101. 870
Patterson, 1.4 miles northwest of, 200 feet north of telegraph milepost 107, on east side of track; spike in fence post, aluminum tag stamped "93" -----	92. 80
Patterson, 2.3 miles northwest of, 25 feet east of track, 200 feet north of milepost 106; spike in fence post, aluminum tag stamped "103" --	103. 17
Patterson, 3.3 miles northwest of, on east side of track, 5 feet north of telegraph milepost 105; iron post stamped "111 G 1909 Cal" -----	110. 461

Primary leveling by L. F. Biggs in 1919

From Vanormer west along highways to west border of quadrangle

Vanormer, 0.7 mile northwest of, 1,000 feet south of milepost 104, 40 feet east of track; iron post stamped "111 1909 Cal. G" -----	110. 411
Vanormer, 0.5 mile southeast of, west side of road, at road crossing, in base of corner fence post painted "U. S. 105 B. M."; spike --	104. 39
Vanormer, 0.8 mile west of, south edge of road, at crossroads, in base of power pole painted "U. S. 124 B. M."; spike -----	123. 64
Vanormer, 1.8 miles west of, south side of road, at crossroads, in base of fence post painted "U. S. 152 B. M."; spike -----	151. 47

	Feet
Vanormer, 3 miles west of, south edge of road, 100 feet west of Del Puerto Creek, on fence line; iron post stamped "186 1919 B B 1"-----	186. 238
Vanormer, 4 miles west of, 20 feet south of road, 10 feet north of Del Puerto Creek, at mouth of canyon, summit of rock; chiseled "U. S. 212"-----	211. 97
Mouth of Del Puerto Canyon, 0.9 mile west of, 100 feet north of Y road west, summit of boulder; chiseled "U. S. 248 B. M."-----	248. 21
Mouth of Del Puerto Canyon, 2.3 miles west of, south bank of creek, north edge of road, in summit of large boulder; bronze tablet stamped "330 1919 B B 2"-----	330. 341

## PACHECO PASS QUADRANGLE

[Latitude 37°-37° 15'; longitude 121°-121° 15']

## MERCED AND STANISLAUS COUNTIES

Primary leveling by L. F. Biggs in 1917

From Pacheco Pass along highways east through quadrangle to San Luis ranch

	Feet
Pacheco Pass, near site of old mountain house, north edge of road, 20 feet west of eucalyptus tree; iron post stamped "1,356 6 1917"-----	1, 357. 069
Pacheco Pass, at east summit, north side of road, in base of telephone pole 25-35, highway b. m. 0400, scribed "U. S. 1386"-----	1, 386. 67
Pacheco Pass, 1.2 miles east of, south edge of road, in base of 18-inch white-oak tree scribed "U. S. 1,024"; copper nail-----	1, 024. 49
Pacheco Pass, 2.5 miles east of, south side of road, in base of 24-inch oak tree scribed "U. S. 650"; copper nail-----	650. 87
Pacheco Pass, 3.5 miles east of, 6 miles west of San Luis ranch house, south side of road, at foot of hill at signboard reading "Los Banos 20 miles"; iron post stamped "450 1917 7"-----	450. 424
San Luis ranch, 4.5 miles west of, in base of telephone pole 20-9 scribed "U. S. 370"; spike (highway b. m. 23)-----	370. 49
San Luis ranch, 2.3 miles west of, north side of road, opposite T road south; iron post stamped "308 1917 8"-----	308. 729
San Luis ranch, 1 mile west of, at angle in road, in base of telephone pole 33-21; spike-----	288. 38

## PETERS QUADRANGLE

[Latitude 37° 52' 30''-38°; longitude 121°-121° 07' 30'']

## SAN JOAQUIN COUNTY

Primary leveling by G. L. Hagman in 1911

From point near Mount Carmel School east to Farmington

	Feet
Mount Carmel School, 2 miles east of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "73.9"-----	73. 60
Farmington, 5.2 miles west of, 900 feet west of Stanley ranch house, south side of road, in fence corner; iron post stamped "80 B"-----	80. 746
Farmington, 4.2 miles west of, 1,000 feet west of county water tank, in base of telephone pole; spike, aluminum tag stamped "83.10"-----	83. 85
Farmington, 3.2 miles west of, where road jogs slightly north, in base of telephone pole; spike, aluminum tag stamped "89.11"-----	89. 97

	Feet
Farmington, 2 miles west of, at bend of road opposite county water tank, on south edge of road, at fence line; iron post stamped "94 B 1911"-----	94.766
Farmington, 1.25 miles west of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "101.12"-----	101.16

**Near Peters**

Peters, 2 miles northeast of, at north side of road, in base of corner fence post; spike, aluminum tag stamped "140.17"-----	140.39
Railroad crossing; top of west rail-----	133.7
Peters, 1 mile northeast of, at south side of road, in base of fence post; spike, aluminum tag stamped "107.18"-----	107.25
Peters-Linden road, at southeast corner of junction with; iron post stamped "102"-----	102.325

**From point near Collegeville to Wildwood School**

Collegeville, 3.4 miles southeast of, near culvert, north side of road, in base of fence post; spike, aluminum tag stamped "71.54"-----	71.05
Collegeville, 2.8 miles southeast of, south side of road, in base of fence post; spike, aluminum tag stamped "69.55"-----	68.93
Collegeville, 2.2 miles southeast of, southwest corner of road forks; iron post stamped "67 B 1911"-----	67.652
Wildwood School, 0.9 mile north of, east side of road, in base of fence post; spike, aluminum tag stamped "65.56"-----	65.63

**PLEASANTON QUADRANGLE**

[Latitude 37° 30'-37° 45'; longitude 121° 45'-122°]

**ALAMEDA COUNTY**

Precise leveling by the U. S. Coast and Geodetic Survey in 1910-11

**From Livermore southwest along Southern Pacific R. R. to Irvington**

	Feet
Livermore, on Farmers' Union Building, just east of Southern Pacific R. R. station and north of track, in south side wall at southeast corner of the building; Geological Survey bronze tablet stamped "488" (U. S. C. & G. S. b. m. F-8)-----	487.712
Livermore, about 1 mile west of, south of Southern Pacific R. R. bridge 45A, north of highway, about 30 meters east of water tank, on top of wall to west abutment of highway bridge; red metal disk (U. S. C. & G. S. b. m. E-8)-----	400.701
Radum, about 1 mile east of Pleasanton, 0.1 mile east of signal tower, on east abutment of Southern Pacific R. R. concrete bridge 42A, south of track, about 3 meters east of derailing switch; red metal disk (U. S. C. & G. S. b. m. D-8)-----	367.614
Pleasanton, 0.25 mile west of the Southern Pacific R. R. station, on south head wall of highway culvert at Southern Pacific R. R. bridge 40C, about 3 meters north of track and 0.18 meter above top of rail; red metal disk (U. S. C. & G. S. b. m. C-8)-----	336.344
Verona, 90 meters west of Southern Pacific R. R. station, 23 meters east of highway crossing, in west abutment of Western Pacific R. R. overhead crossing, about 6 meters from east edge of abutment, 0.6 meter above Southern Pacific track; red metal disk (U. S. C. & G. S. b. m. B-8)-----	302.604

	Feet
Brightside, about 200 meters east of station, at mileage 34.9 on Southern Pacific R. R., north of track, on east abutment of Western Pacific R. R. bridge over Alameda Creek; red metal disk (U. S. C. & G. S. b. m. A-8)-----	225.544
Farwell, about 60 meters east of Southern Pacific R. R. station, 12 meters north of track; Geological Survey iron post stamped "167.099" (U. S. C. & G. S. b. m. Z-7)-----	167.496
Niles, about 1 mile east of, on north end of Southern Pacific R. R. bridge 30D over Alameda Creek; red metal disk (U. S. C. & G. S. b. m. Y-7)-----	124.383
Niles, about 60 meters west of railroad station, on southern one of two easternmost pillars under wooden water tank; red metal disk (U. S. C. & G. S. b. m. X-7)-----	86.699
Niles, 0.5 mile south of railroad station, about 9 meters north of crossing of Southern Pacific and Western Pacific railroads, east of track, on top of rock abutment of Southern Pacific R. R. bridge over Alameda Creek; red metal disk (U. S. C. & G. S. b. m. W-7)-----	84.271
Irvington, about 90 meters north of Southern Pacific R. R. station, on west head wall of culvert under tracks; red metal disk (U. S. C. & G. S. b. m. V-7)-----	70.029

Primary leveling by J. A. Vogelsson in 1896

**From Livermore west along road to Dublin, thence northwest to Contra Costa-Alameda county line**

Livermore, in front of station, main track; top of rail-----	482.2
Tassajero, junction with road to, at northwest corner; iron post stamped "346"-----	346.077
Tassajero Valley, about 2.5 miles north of main road, on west side of Tassajero road, 2.2 feet east of monument on line between Contra Costa and Alameda counties; iron post stamped "485" (on a spur from preceding bench mark)-----	485.260
Dublin, intersection of center line of San Ramon road and south line of main road; iron post stamped "367"-----	366.817
Contra Costa and Alameda counties, boundary line, 2.3 feet west of county-line monument, on east side of road; iron post stamped "425"-----	424.970

**From Livermore west along Southern Pacific R. R. to Pleasanton, thence south to Sunol, thence west to Niles, thence south to Irvington**

Livermore, 300 feet east of station, near eucalyptus tree 18 inches in diameter; iron post stamped "486 B"-----	486.373
Livermore, southeast corner of block north of Southern Pacific R. R. track, in Farmers' Union Building; bronze tablet stamped "488" (U. S. C. & G. S. b. m. F-8)-----	487.712
Milepost 45, 225 feet west of, north side of track; iron post stamped "381.911 B"-----	382.123
Pleasanton, 4 feet east of milepost 42; iron post stamped "360.736 B"-----	361.023
Milepost 39, 5 feet north of; iron post stamped "297.496 B"-----	297.807
Milepost 36, 150 feet west of, on south side of track near fence; iron post stamped "227 B"-----	227.487
Farwell station, 200 feet east of; iron post stamped "167.099 B" (U. S. C. & G. S. b. m. Z-7)-----	167.496

	Feet
Niles, in school yard, 6 feet north of west gate; iron post stamped "76.408 B"-----	76.791
Irvington, 100 feet east of Irvington Hotel, at northeast corner of fence; iron post stamped "71.631 B"-----	71.993

From Irvington northeast along road to Livermore

Mission Pass, 5 feet east of electric-light pole 3803; iron post stamped "649.890 B"-----	650.173
Sunol, 2 miles east of, 40 feet from bridge, north side of road; iron post stamped "336.986 B"-----	337.193
Livermore, 5 miles southwest of, opposite old barn on east side of road, 10 feet west of oak tree on west side of road; iron post stamped "609.917 B"-----	610.041

RIPON, SALIDA, WESTLEY, AND WESTPORT QUADRANGLES

[Latitude 37° 30'-37° 45'; longitude 121°-121° 15']

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by W. H. Monshan in 1909 and D. S. Birkett in 1912-13

From milepost 101 near Ripon west and southwest along highway to San Joaquin River

	Feet
Milepost 104 (now 103) 50 feet north of, west side of track, at fence line; iron post stamped "61 B"-----	61.474
Ripon, 1 mile west of, at T in telephone line, 200 feet east of E. H. Graves's ranch house, south side of road; spike in base of telephone pole described "U. S. 58 B. M."-----	58.15
Ripon, 2.2 miles west of, at Thomas Frederick's ranch, near intersection with private road leading north, 450 feet east of residence, south side of road; spike in base of telephone pole scribed "U. S. 55 B. M."-----	55.25
Ripon, 3 miles west of, southwest corner of intersection of roads, 900 feet west of F. Stephenson's ranch house; iron post stamped "46 1912"-----	46.099
Ripon, 3.7 miles west of, at T in roads, opposite small cottage with windmill in yard; spike in base of H. Rutler's mailbox post, scribed "U. S. 42 B. M."-----	42.34
Ripon, 5.6 miles due west of, 0.4 mile east of N. Jorgenson's ranch house, south side of road, at gatepost leading to William Garvey's ranch house, 30 feet east of William Garvey's mailbox; spike in gatepost scribed "U. S. 34 B. M."-----	34.04
San Joaquin bridge, 1.3 miles northeast of, 7 miles west by 4 miles south of Ripon, southeast corner of steel bridge over Red Bridge Slough, in concrete abutment; aluminum tablet stamped "30 1912"-----	30.861

From point 1.5 miles northwest of Modesto southwest along highway 8.3 miles, thence south 4 miles, thence east and south to sec. 12, T. 5 S., R. 8 E.

Modesto, 200 feet north of intersection of H St., California Ave., and Washington St.; top of bolt on edge of water-wagon hydrant, opposite first O in Modesto-----	83.31
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	Feet
Modesto, 1.6 miles southwest of, third concrete syphon on road from Modesto, north side of road; chiseled square on top of syphon, marked "U. S. 82 B. M."-----	82. 17
Modesto, 2.1 miles southwest of, north side of road, opposite James McNeil's ranch, in top of fourth concrete syphon from Modesto; aluminum tablet stamped "73 1912"-----	73. 478
Modesto, 3.4 miles southwest of, at big angle in road, south side of road, northwest corner of brick building; spike driven in base, marked "U. S. 67 B. M."-----	67. 12
T. 4 S., R. 8 E., corner of secs. 3, 4, 9, and 10, 5.2 miles southwest of Modesto, intersection of Modesto-Tuolumne road and Stone Ave., in top of concrete syphon; aluminum tablet stamped "62 1912"-----	62. 830
Modesto, 7 miles southwest of, 0.2 mile east of Shiloh School, 200 feet west of road leading to C. E. Nichol's house, south side of road; spike in base of telephone pole, marked "U. S. 56 B. M."----	56. 35
Tuolumne, 1.5 miles north by 0.5 mile east of, 0.3 mile west of Shiloh School, south side of road; chiseled square on top of concrete syphon, marked "U. S. 54 B. M."-----	54. 03
T. 4 S., R. 9 E., N. W. $\frac{1}{4}$ sec. 7, 0.5 mile north of Tuolumne, at T in road, northwest corner of intersection, near fence corner; iron post stamped "48 1912"-----	48. 372
Tuolumne; floor of bridge over San Joaquin River-----	54. 5
Tuolumne, 0.7 mile south of, south end of guard rail of wooden bridge over slough; spike on west side of bridge, marked "U. S. 43 B. M."-----	43. 86
Tuolumne, 1 mile southeast of, 400 feet north of T in road, west side of road; chiseled square on top of concrete syphon, marked "U. S. 50 B. M."-----	50. 93
Tuolumne, 2.1 miles southeast of, 0.5 mile north of road west to Westley and east to Ceres, west side of road; spike in top of head gate of irrigation lateral, marked "U. S. 55 B. M."-----	55. 57
T. 4 S., R. 8 E., corner of secs. 19, 20, 29, and 30, 10 miles west by 1.5 miles south of Ceres, south side of Ceres road, 1 mile west of Laird School, 33 feet west from north-south fence; iron post stamped "49 1912"-----	49. 512
Ceres, 8 miles west of, opposite Laird School, at intersection of road, south side of road; spike in telephone pole, marked "U. S. 53 B. M."-----	53. 33
Ceres, 7 miles west of, at T in roads, south side of road, 10 feet east of irrigation ditch; spike in telephone pole, marked "U. S. 58 B. M."-----	58. 46
Ceres, 6 miles west by 1.5 miles south of, at corner of secs. 22, 23, 26, 27, T. 4 S., R. 8 E., 2 miles east of Laird School, at southeast corner of intersection of roads; iron post stamped "59 1912"-----	59. 309
T. 4 S., R. 8 E., corner of secs. 23, 24, 25, and 26, 1.5 miles south by 5 miles west of Ceres, southwest corner of intersection of roads; spike in base of telephone pole marked "U. S. 62 B. M."-----	62. 13
Ceres, 2.5 miles south by 5 miles west of, southeast corner of intersection of roads, southwest corner of sec. 25; spike in fence post, marked "U. S. 56 B. M."-----	56. 76
T. 4 S., R. 8 E., southeast corner of sec. 25, northwest corner of intersection of roads, near Westport Church; iron post stamped "63 1912"-----	63. 237

	Feet
T. 5 S., R. 9 E., northwest corner of sec. 6, 100 feet south of irrigation lateral No. 3, east side of road; spike in telephone pole, marked "U. S. 60 B. M."-----	60.84
T. 5 S., R. 9 E., southwest corner of sec. 6, at T in roads, east side of road; spike in base of telephone pole, marked "U. S. 60 B. M."-----	60.07
T. 5 S., R. 8 E., southeast corner of sec. 12, northwest corner of intersection of roads, 15 feet east of irrigation lateral; iron post stamped "53 1912"-----	53.989
<b>From southeast corner of sec. 19, T. 4 S., R. 8 E., west and south to Westley</b>	
T. 4 S., R. 7 E., southeast corner of sec. 24, 2.8 miles east of Grayson, at T in roads, southwest corner of intersection; spike in telephone pole, marked "U. S. 46 B. M."-----	46.50
T. 4 S., R. 7 E., southwest corner of sec. 24, steel highway bridge crossing Laird Slough, southwest corner; chiseled square on top of concrete pier, marked "U. S. 45" (tie U. S. C. E.)-----	45.50
Grayson, 0.3 mile northeast of, at drawbridge over San Joaquin River, upstream side of bridge, west end; chiseled square and "U. S." on top of concrete cylinder marked "43 B. M." (tie U. S. C. E.)----	43.31
Westley, 1 mile east of, at T in roads near cemetery, south side of road; spike in telephone pole, marked "U. S. 58 B. M."-----	58.63
<b>From point 1.5 miles southeast of Vernalis east 4.7 miles to San Joaquin River</b>	
Romain, opposite signboard on Southern Pacific R. R.; top of rail----	93.4
T. 4 S., R. 6 E., southeast corner of sec. 1, 1 mile east of Romain; spike in fence post marked "U. S. 74 B. M."-----	73.76
Romain, 2 miles east of, at southwest corner of intersection of east-west road with Grayson-San Joaquin City road; spike in telephone pole, marked "U. S. 55 B. M."-----	54.75
Vernalis, 1 mile south by 4.7 miles east of, on ranch on opposite side of river from Frankenheisner stock ranch, 0.5 mile east of private water tank, in base of north side of gate leading to levee 30 feet distant; spike, marked "U. S. 32 B. M."-----	31.65
T. 4 S., R. 7 E., northeast corner of sec. 4 (unsurveyed), 5 miles east by 1 mile south of Vernalis, 75 feet from west bank of San Joaquin River, 1,100 feet east of levee on west side of river opposite old one-story shack on Frankenheisner's stock ranch, 700 feet from building on inside of curve of meander of river, 0.4 mile downstream from channel excavated by dredger in building a levee perpendicular to river, near fence which follows curve of river, 3 feet west of large fence post with white band painted around top; iron post stamped "33 1913" (tie U. S. C. E.)-----	32.891
<b>From point 3.3 miles northwest of Patterson northwest along Southern Pacific R. R. to point 6.3 miles northwest of Westley</b>	
Patterson, 4.5 miles northwest of, 10 feet west of track, 200 feet north of telegraph milepost 104; spike in whistle post, aluminum tag stamped "104"-----	103.83
Patterson, 5.4 miles northwest of, 100 feet north of milepost 103, on east side of track; spike in fence post, aluminum tag stamped "95"-----	94.34
Patterson, 6.3 miles northwest of, 200 feet north of telegraph milepost 102, on east side of track; spike in fence post, aluminum tag stamped "87"-----	86.55

	Feet
Westley, 200 feet east of, in front of station; iron post stamped "86 G 1909 Cal"-----	85.794
Westley, 1.3 miles northwest of, on east side of track, 150 feet north of milepost 700; spike in base of whistle signpost, aluminum tag stamped "91"-----	91.11
Westley, 2.3 miles northwest of, 25 feet east of track, 300 feet north of telegraph milepost 99; spike in fence post, aluminum tag stamped "94"-----	94.10
Westley, 3.3 miles northwest of, 25 feet east of track, 5 feet south of milepost 98; iron post stamped "85 G 1909 Cal"-----	85.190
Westley, 4.3 miles northwest of, 25 feet east of track, 100 feet north of telegraph milepost 97; spike in fence post, aluminum tag stamped "80"-----	79.28
Westley, 5.3 miles northwest of, 25 feet east of track, 150 feet north of telegraph milepost 96; spike in fence post; aluminum tag stamped "87"-----	87.08
Westley, 6.3 miles northwest of, 25 feet east of track, 5 feet south of telegraph milepost 95; iron post stamped "100 G 1909 Cal"---	99.532

## ROMAIN QUADRANGLE

[Latitude 37° 30' -37° 37' 30"; longitude 121° 15' -121° 22' 30"]

## SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by L. F. Biggs in 1919

Along highways near southwest corner of quadrangle

	Feet
Mouth of Hospital Canyon, 1.6 miles southwest of, at road northwest, in fence post painted "U. S. 431"; spike-----	430.94
Mouth of Hospital Canyon, 50 feet north of creek bank, at road to house, in gatepost painted "U. S. 350"; spike-----	349.35
Common corner of Tps. 3 and 4 S., Rs. 5 and 6 E., west edge of road at road east; iron post stamped "278 1919 B B 12"-----	277.507
Ingram Canyon, 2.6 miles northwest of Spring Canyon, 20 feet west of road; summit of boulder, chiseled "U. S. 1,038"-----	1,037.94
Ingram Canyon, 3.6 miles northwest of Spring Canyon, 0.1 mile northwest of mine buildings, north of road, in base of 36-inch oak tree, scribed "U. S. 1,281"; nail-----	1,281.06
Mouth of Spring Canyon, 4 miles northwest of, south edge of trail, in saddle between Ingram and Hospital Canyons; rock point, marked "1,566"-----	1,566.37
Mouth of Spring Canyon, 4 miles northwest of, 0.1 mile west of saddle between Ingram and Hospital Canyons, on summit of hill; bronze tablet stamped "1,651 B 1919 B 10"-----	1,650.938
Summit of saddle between Ingram and Hospital Canyons, 0.5 mile north of, in small flat, west of trail, at foot of tree; summit of boulder chiseled "U. S. 1,215"-----	1,214.99
Hospital Canyon, 0.6 mile south of, east of drain at trail and canyon forks; summit of boulder, chiseled "U. S. 744"-----	743.35
Mouth of Hospital Canyon, 3.5 miles west of, 50 feet south of road, at trail forks to Ingram Canyon; summit of boulder, chiseled "U. S. 595"-----	595.02

## Primary leveling by D. S. Birkett in 1912

From point 1.5 miles southeast of Vernalis east 4.7 miles to San Joaquin River

	Feet
Romain, opposite signboard on Southern Pacific R. R.; top of rail_____	93.3
T. 4 S., R. 6 E., southeast corner of sec. 1, 1 mile east of Romain; spike in fence post, marked "U. S. 74 B. M."-----	73.71

From Mount Boardman quadrangle north along highways through west part of Romain quadrangle into Vernalis quadrangle

T. 5 S., R. 6 E., sec. 9, Ingram Canyon, 50 feet west of mouth of Spring Canyon; iron post stamped "671 B 1919 B 9"-----	671.001
Ingram Canyon, 1 mile northwest of mouth of Spring Canyon, north-east of road, in root of 24-inch oak tree scribed "U. S. 813"; nail--	813.06
Ingram Canyon, 1.7 miles northwest of Spring Canyon, 50 feet north of road forks; summit of boulder, chiseled "U. S. 876"-----	875.97

## Primary leveling by W. H. Monahan in 1909

From point near Emerald to point near Westley

Westley, 5.3 miles northwest of, 25 feet east of track, 150 feet north of telegraph milepost 96; spike in fence post, aluminum tag stamped "87"-----	87.03
Westley, 6.3 miles northwest of, 25 feet east of track, 5 feet south of telegraph milepost 95; iron post stamped "100 G 1909 Cal"-----	99.482

## SALIDA QUADRANGLE

[Latitude 37° 37' 30"-37° 45'; longitude 121°-121° 07' 30"]

## STANISLAUS COUNTY

Primary leveling by G. L. Hagman in 1911

## Near Ripon

	Feet
Ripon, 1.7 miles northeast of, at turn of road to north, at north-west corner, in base of fence post; spike, aluminum tag stamped "75"-----	75.88
Ripon, 0.4 mile east of, at turn of road to north, at northwest corner, in base of fence post; spike, aluminum tag stamped "68"-----	68.48
Manteca, 6 miles southeast of, on west side of railroad, 50 feet north of milepost 104 (now 103) at fence line; iron post stamped "61 B 1901" (Bull. 342, p. 16)-----	61.474
Ripon, 0.5 mile north of, on east side of road, in base of telephone pole 550-107; spike, aluminum tag stamped "66.63"-----	65.89

## SAN JOSE QUADRANGLE

[Latitude 37° 15'-37° 30'; longitude 121° 45'-122°]

## ALAMEDA AND SANTA CLARA COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1910-11

From Warmsprings south along Southern Pacific R. R. to San Jose, thence northwest to Lawrence

	Feet
Warmsprings, on west head wall of culvert 34E under Southern Pacific R. R. track; red metal disk (U. S. C. & G. S. b. m. U-7)---	32.139
Warmsprings, about 90 meters north of Southern Pacific R. R. station, on west head wall of culvert 36B under crossing of track and highway; red metal disk (U. S. C. & G. S. b. m. T-7)----	42.064

	Feet
Warm Springs, in west head wall of culvert 38A under Southern Pacific R. R. track and about 0.6 meter below it; red metal disk (U. S. C. & G. S. b. m. S-7)-----	15. 738
This bench mark has probably been destroyed or moved.	
Milpitas, at Southern Pacific R. R. mileage 39.9, in top surface of west head wall of culvert under county road, about 24 meters east of track and about 1 meter above county road; red metal disk (U. S. C. & G. S. b. m. R-7)-----	17. 136
Wayne, at mileage 43.9 of Southern Pacific R. R., in top of south abutment to bridge 43G, east of the track and about 0.5 meter below it; red metal disk (U. S. C. & G. S. b. m. Q-7)-----	67. 684
Santa Clara, north of Southern Pacific R. R. station, in south end of large grass park; red metal disk set in concrete post (U. S. C. & G. S. b. m. N-7)-----	75. 449
Lawrence, opposite Southern Pacific R. R. station, on the right of way, 40.9 meters north of track, 1.9 meters from line fence, 8.9 meters west of road fence; red metal disk set in concrete post (U. S. C. & G. S. b. m. M-7)-----	66. 991

Precise leveling by U. S. Coast and Geodetic Survey in 1919

Near San Jose

San Jose, at east entrance to Hall of Records, on north balustrade about 1.5 meters above ground; U. S. G. S. aluminum-bronze disk stamped "98 S. F." (U. S. C. & G. S. b. m. P-7)-----	98. 097
San Jose, just west of Southern Pacific R. R. station, south of tracks, in northwestern one of four center pillars under Southern Pacific water tank; red metal disk (U. S. C. & G. S. b. m. O-7)-----	90. 088
San Jose, in northeast corner of Trinity Parish Episcopal Church; G. S. aluminum tablet stamped "S. F. 98-1908 36"-----	97. 474
San Jose, 21 North First St., in southeast corner of brick warehouse and office of The Sperry Flour Co.; G. S. tablet stamped "S. F. 96 1908 1" (U. S. C. & G. S. b. m. I-19)-----	95. 892
San Jose, 3.5 miles south of, 50 feet west of milepost 54, west of track, 400 feet north of Franklin School; iron post stamped "S. F. 130 1908 2" (U. S. C. & G. S. b. m. J-19)-----	130. 452
San Jose, 6.5 miles south of, west of track, 50 feet west of milepost 57; U. S. G. S. iron post stamped "S. F. 176 1908 B" (U. S. C. & G. S. b. m. K-19)-----	176. 004
San Jose, 9.7 miles south of, 800 feet south of milepost 60, 50 feet north of road to Mrs. L. Little's ranch house where it crosses railroad, at west edge of wagon road; U. S. G. S. iron post stamped "S. F. 199 1908 4" (U. S. C. & G. S. b. m. L-19)-----	198. 983
San Jose, on Southern Pacific R. R. culvert 62-B over irrigation canal, in northwest corner; red metal disk (U. S. C. & G. S. b. m. N-19)-----	252. 516
San Jose, 12.5 miles south of, 0.2 mile north of Coyote, 150 feet south of road crossing, opposite milepost 63, west of track; G. S. iron post stamped "S. F. 253 1908 5" (U. S. C. & G. S. b. m. O-19)-----	253. 520
Coyote, just north of Southern Pacific R. R. station, east of track, in southwest one of four center pillars under Southern Pacific water tank; red metal disk (U. S. C. & G. S. b. m. P-19)---	255. 252

Primary leveling by C. C. Ward in 1899, by B. A. Jenkins in 1908, by L. F. Biggs in 1909, and by S. E. Blout in 1903

From Irvington south along Southern Pacific R. R. to San Jose

	Feet
Milepost 37; iron post stamped "46.563 B"-----	46.903
Milepost 40, 350 feet south of, opposite small bridge, east side of track; iron post stamped "11.301 B"-----	11.565
Milepost 43, 475 feet south of, at highway crossing, west of track; iron post stamped "37.505 B"-----	37.694
Milepost 46, 50 feet east of, east of track; iron post stamped "69.117 B"-----	69.230

At San Jose

San Jose, 150 feet east of Southern Pacific R. R. standard-gage station, in circular base of iron water stand about 2 feet in diameter; log bolt (U. S. C. & G. S. b. m.)-----	91.54
--	-------

From San Jose southeast along railroad 8.6 miles

San Jose, 2 miles south of, 300 feet north of brickworks, west of railroad, in base of semaphore; bolthead, painted "U. S. 112 B. M. No. 1"-----	112.68
Edenvale, in front of station; top of rail-----	183.7

From San Jose southwest along Southern Pacific R. R. to point 2 miles north of Los Gatos

San Jose, in front of narrow-gage station; top of rail-----	96.4
Campbell, in front of station; top of rail-----	199.5
Campbell, 1.1 miles southwest of, 100 feet east of tank, in cement culvert; aluminum tablet stamped "S. F. 225 1908 35"-----	224.802
Vasona, in front of station; top of rail-----	276.

SAN LUIS CREEK QUADRANGLE

[Latitude 37°-37° 07' 30"; longitude 121°-121° 07' 30"]

MERCED COUNTY

Primary leveling by Roscoe Reeves in 1916

From north border of quadrangle along highway south and east through center of quadrangle to east border of quadrangle

	Feet
San Luis ranch, 2.5 miles north of, 300 feet north of summit of road to Howard ranch, in gatepost; spike, painted "384"-----	383.93
San Luis ranch, 1.2 miles north of, 6 feet west of road; painted circle on rock flush with ground, painted "271"-----	270.94
San Luis ranch, 0.5 mile northeast of, 200 feet northeast of stream crossing, summit of hill, on boulder flush with ground; circle, painted "274"-----	273.96
San Luis ranch, on east post of northeast gate of barnyard to pasture; spike, painted "259" on post-----	258.99
Los Banos, 14 miles west of, 200 feet west of San Luis Creek, at entrance to San Luis ranch, in telephone pole; spike, painted "253" on pole-----	252.77
Los Banos, 14 miles west of, 200 feet west of San Luis Creek, north edge of road, on west side of driveway entrance to San Luis ranch; iron post stamped "252"-----	252.453

	Feet
Los Banos, 12 miles west of, at angle in road where telephone line leaves highway, in telephone pole; spike, painted "257" on pole-----	256.55
Los Banos, 11 miles west by 1 mile north of, at T road south, north side of road, in west gatepost; spike, painted "217" on post-----	216.66
Los Banos, 11 miles west of, in telephone pole 36-16, south side of L road; spike, painted "300" on pole-----	300.07
T. 10 S., R. 8 E., southeast corner of sec. 13, 11 miles west of Los Banos, 10 feet south of telephone pole 36-16; iron post stamped "300"-----	299.997
T. 10 S., R. 9 E., southwest corner of sec. 17, in telephone pole; spike, painted "296" on pole-----	296.11
Howard ranch, 2.5 miles southwest of, 500 feet south of ranch house, in corner fence post; spike, painted "279"-----	279.73
T. 9 S., R. 8 E., near center of sec. 27, 500 feet southwest of ranch house, in northeast corner of T road east, in southwest corner of barn lot; iron post stamped "279"-----	279.795
San Luis ranch, 3.1 miles north of, on road to Howard ranch, east edge of road; painted circle on boulder flush with ground, painted "254"-----	254.39

## STOCKTON QUADRANGLE

[Latitude 37° 52' 30"-38°; longitude 121° 15'-121° 22' 30"]

## SAN JOAQUIN COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey

From El Pinal south along Southern Pacific R. R. to French Camp

	Feet
El Pinal, in north abutment of bridge 93A, west of Southern Pacific R. R. track, about 0.6 meter below top of rail; red metal disk (U. S. C. & G. S. b. m. G-9)-----	28.077
Stockton, about 2 miles north of, 10 meters north along the track from milepost 93, 0.5 meter west of east line fence on right of way of Southern Pacific R. R., 15.7 meters east of track and about 1 meter below it; Geological Survey iron post stamped "20 B" (U. S. C. & G. S. b. m. F-9)-----	20.568
Stockton, in Western Pacific R. R. station, in west side of southwest pillar of portico at south end; red metal disk (U. S. C. & G. S. b. m. E-9)-----	23.232
Stockton, in top of concrete curbing around a palm tree, in passageway between Southern Pacific R. R. waiting room and baggage room; red metal disk (U. S. C. & G. S. b. m. D-9)-----	19.665
Stockton, about 2 miles south of, in east head wall of concrete culvert 87B, under Southern Pacific R. R. track, 140 meters north of Western Pacific R. R. crossing, about 0.6 meter below the track; red metal disk (U. S. C. & G. S. b. m. C-9)-----	17.428
French Camp, about 1 mile north of, 0.6 meter east of Southern Pacific R. R. milepost 87, 1 meter below the track; Geological Survey iron post stamped "15 B" (U. S. C. & G. S. b. m. B-9)---	14.035

NOTE.—B-9 bench mark of the U. S. Geological Survey, the position of which was originally published as 8 feet south of milepost 88, was found washed out and was relocated as described above.

	Feet
French Camp, about 0.7 mile north of, at railroad mileage 86.7, on east head wall of concrete culvert 86C of Southern Pacific R. R., about 0.6 meter below the track; red metal disk (U. S. C. & G. S. b. m. A-9)-----	17. 723
French Camp, in east head wall of concrete culvert 84A under Southern Pacific R. R. track; red metal disk (U. S. C. & G. S. b. m. Z-8)-----	22. 808

QUADRANGLE INCLUDING LATHROP, MANTECA, RIPON, SALIDA, STOCKTON, TRACY, VERNALIS, WESTLEY, AND WESTPORT 7½' QUADRANGLES

[Latitude 37° 30'-38°; longitude 121°-121° 30']

SAN JOAQUIN AND STANISLAUS COUNTIES

Precise leveling by C. H. Semper in 1901-2

From milepost 94 southeast along Southern Pacific R. R. to Modesto

	Feet
Milepost 94, 8 feet north of, east side of track, on fence line; iron post stamped "20 B"-----	20. 568
Stockton, at Park St. crossing; top of rail-----	19. 0
Stockton, San Joaquin County courthouse, west door of north entrance, in angle of wall; bronze tablet stamped "18 B"-----	18. 353
Stockton, in front of station; top of rail-----	19. 2
Stockton, at Sacramento St. crossing; top of rail-----	22. 4
Stockton, 0.6 mile south of, at crossing of Santa Fe Ry.; top of rail-----	22. 1
French Camp, 1 mile north of, 2 feet east of milepost 87; iron post stamped "15 B" (Reset by U. S. C. & G. S.)-----	14. 035
French Camp, in front of station; top of rail-----	19. 8
Milepost 85, 200 feet east of, east side of track, at road crossing, at fence line; iron post stamped "19 B"-----	19. 357
Lathrop, 250 feet north of station, at northwest corner of railroad park, on edge of road; iron post stamped "20 B"-----	20. 321
Lathrop, in front of station; top of rail-----	22. 0
Manteca, 25 feet south of station, 20 feet west of milepost 98, at fence line; iron post stamped "36 B"-----	36. 221
Manteca, 2.9 miles south of, 20 feet west of milepost 10, west side of track, at fence line; iron post stamped "45 B"-----	45. 392
Milepost 104, 50 feet north of, west side of track, at fence line; iron post stamped "61 B"-----	61. 474
Ripon, crossing at station; top of rail-----	67. 9
Ripon, 2.3 miles south of, opposite milepost 107, east side of track, at fence line; iron post stamped "67 B"-----	66. 995
Salida, 2.6 miles south of, opposite milepost 110, east side of track, at fence line; iron post stamped "78 B"-----	77. 974
Milepost 113, opposite, east side of track, at fence line; iron post stamped "82 B"-----	82. 527
Modesto, in front of station; top of rail-----	86. 5
Modesto, in southwest corner of courthouse; bronze tablet stamped "91 B"-----	91. 742

## Primary leveling by J. B. Lippincott in 1896

## At Stockton

	Feet
Stockton, southwest corner of Scott Ave. (south side of Mormon Channel) and Center St., west end of Cool Corner saloon, on north iron doorsill; "Cool Corner" bench mark-----	16. 033
Stockton, southwest corner of Scott Ave. and Center St., 18 feet from curb corner, 12 feet north of iron doorsill; iron post stamped "16"-----	16. 373
Stockton channel, at southeast head of, corner of Weber Ave. and Eldorado St., east of steps at corner post; iron plate-----	13. 114
Stockton, on north side of courthouse and west side of walk, on top of stone post-----	16. 49
Stockton, San Joaquin courthouse, in angle of wall near columns, between north door and first window west of it; bronze tablet stamped "18"-----	18. 353
Stockton, Southern Pacific R. R. passenger station, Milton and Oakland branch; top of rail-----	19. 1
<b>From Stockton northeast along Milton road and Southern Pacific R. R. to Peters</b>	
J. B. Marsh's house, at northeast corner of entrance of lean-to; iron post stamped "34"-----	34. 055
Farmington, junction with road to, near Smyth's ranch; iron post stamped "67"-----	67. 051
Peters-Linden road, at southeast corner of junction with; iron post stamped "102"-----	102. 325

## Primary leveling by U. S. Corps of Engineers in 1913-14

Patterson Colony, 3 miles northeast of, at southeast corner of intersection of Olive and Willow avenues, 1,900 feet south of river; iron post set in concrete (U. S. C. E. b. m. 421)-----	52. 47
Patterson Colony, 3.5 miles north of, south of Lemon Ave., 1,100 feet west of river bank, northeast corner of M. W. Anderson's 20-acre lot No. 696; iron post set in concrete (U. S. C. E. b. m. 432)-----	50. 23
Patterson, about 3.75 miles north of, south line of Fruit Ave. (Patterson Colony), 2,100 feet west of north bank of river and 1,200 feet west of west bank of bottom land, northeast corner block 714 of Patterson Colony; iron post set in concrete (U. S. C. E. b. m. 423)-----	45. 33
Ritchie ranch, 3.4 miles east of, at corral fence intersection, 2,500 feet west of east bank of San Joaquin River, 400 feet west of oak tree in another corral, on west bank of slough, 2 miles south of McPike Landing, 1,700 feet northwest of Puerto Creek; iron post set in concrete (U. S. C. E. b. m. 424)-----	48. 81
Laird Slough Bridge, 1.75 miles above, in wire fence line, 30 feet west of 3.5-foot oak tree, 0.5 mile south of McFall ranch house, 250 feet north of right bank of river, at mouth of slough which is outlet for Brush Lake; iron post set in concrete (U. S. C. E. b. m. 425)-----	45. 14
T. 4 S., R. 7 E., southwest corner of sec. 24, steel highway bridge on Laird Slough, southwest corner, on top of concrete pier marked "U. S. 45"; chiseled square (U. S. G. S. b. m. 7)-----	45. 50

	Feet
McPike Landing, in fence line 80 feet south of south river bank, 30 feet west of west bank of slough 75 feet wide, 110 feet east of 3-foot oak tree, 130 feet north of 3.5-foot oak tree, 200 feet south of angle in fence; (U. S. C. E. b. m. 426) iron post set in concrete-----	47. 17
Dos Rios Rancho, 180 feet east of east bank of Laird Slough, 125 feet east of center line of 6-foot levee, opposite pile and brush retaining wall of Dos Rios dairy, in fence line, 8,000 feet north of Laird Slough Bridge; iron post set in concrete (U. S. C. E. b. m. 426½) -----	38. 69
Grayson, 0.3 mile northeast of, at drawbridge over San Joaquin River, upstream side of bridge (west end), on top of concrete cylinder, marked "U. S. 43 B. M."; chiseled square (U. S. G. S. b. m. 7)-----	43. 31
Upper White Lake Slough Inlet, 25 feet west of west bank of river, 125 feet south of south bank of slough to White Lake, 25 feet north of 2.5-foot oak tree, 3,000 feet north of mouth of Laird Slough; iron post set in concrete (U. S. C. E. b. m. 427)-----	38. 75
Upper White Lake, 1 mile north of, at horseshoe bend, 60 feet west of west bank of river, 30 feet north of 4.5-foot oak tree, 2,600 feet above mouth of Tuolumne River, directly opposite point of land at inside of bend; iron post set in concrete (U. S. C. E. b. m. 428)-----	36. 98
Sturgeon Bend, 185 feet west of west bank of San Joaquin River, 5 feet from 3-foot oak tree, 50 feet from 4-foot oak, 1 mile below inlet of Finnegan Cut, at lower end of bend in river; iron post set in concrete (U. S. C. E. b. m. 429)-----	34. 99
McPherson Bridge over Finnegan Cut, 65 feet north of north end of, 50 feet east of cabin 3,700 feet below inlet, 55 feet east of east bank of Finnegan Cut; iron post set in concrete (U. S. C. E. b. m. 430)-----	34. 21
Finnegan Cut, 100 feet east of east bank of, 150 feet southeast of point where Finnegan Cut branches, 6 feet from 3-foot oak tree, 2,400 feet below intersection of Amphir and Finnegan Cuts, 1,200 feet below lower end of small island formed by 2 parts of Finnegan Cut; iron post set in concrete (U. S. C. E. b. m. 431)-----	30. 63
Vernalis, 5 miles east and 1 mile south of, 25 feet from west bank of San Joaquin River, 1,100 feet east of levee, 0.4 mile downstream from channel excavated by dredger in building a levee perpendicular to river, near fence which follows curve of river, 3 feet west of large fence post with white band painted around top; iron post stamped "33 1913" (U. S. G. S. b. m.)-----	32. 89
Minges's Landing, 12 feet northwest of pump station, 100 feet west of west bank of San Joaquin River, 175 feet east of group of four oak trees at fence line; iron post set in concrete (U. S. C. E. b. m. 432)-----	33. 87
Elliott Lake, at Rod and Gun Club grounds, 170 feet east of east bank of lake, 170 feet east of group of 3.5-foot and 4-foot oak trees, in east and west fence line, 25 feet east of gate, at fence intersection, 65 feet south of gun club barn; iron post set in concrete (U. S. C. E. b. m. 433)-----	32. 48

	Feet
Stadler's ranch house, 0.5 mile north of, 100 feet southwest of southwest bank of river, 50 feet west of levee 6 feet high, at end of temporary road from ranch house to river, 50 feet south of group of 3-foot oak trees, 1 mile north of Minges's Landing, about 900 feet up second ranch above mouth of Stanislaus River; iron post set in concrete (U. S. C. E. b. m. 434)-----	32. 29
At lower end of first ranch below Stanislaus River, 60 feet east of 2.5-foot leaning oak, at top break of east (right) bank of San Joaquin River, 0.5 mile below mouth of Stanislaus River, 150 feet below inlet of nearest of two sloughs which bear northerly; iron post set in concrete (U. S. C. E. b. m. 435)-----	30. 71
John Ohm Place, San Joaquin City, at fence line of yard, 50 feet southwest of John Ohm residence, about 100 feet northeast of northeast fence line of main road; iron post set in concrete (U. S. C. E. b. m. 436)-----	43. 54
Gerlach ranch house, 500 feet southwest of southwest bank of river, at fence intersection, 320 feet east of barn, 380 feet southeast of house, 0.75 mile north of junction of Ripon and San Joaquin City and Banda roads, at abandoned hotel; iron post set in concrete (U. S. C. E. b. m. 437)-----	31. 44
Gerlach place, 4,800 feet north of, 250 feet south of south (left) bank of San Joaquin River, in group of 4-foot oak trees at upper end of long reach, about 350 feet south of mouth of slough which bears northeasterly; iron post set in concrete (U. S. C. E. b. m. 438)-----	27. 17
San Joaquin City, 1.3 miles northeast of, at Durham Ferry Bridge, 7 miles west and 4 miles south of Ripon, southeast corner of steel bridge over Red Bridge Slough, in concrete abutment; U. S. G. S. aluminum tablet, stamped "30 1912"-----	30. 861
Red Bridge Slough, 2,800 feet west of outlet of, at right angle bend in San Joaquin City-Ripon road, 2 miles west and 6 miles south of Ripon, south side of road, 25 feet east of fence intersection, on levee, 8 feet from 3-foot oak tree; iron post set in concrete (U. S. C. E. b. m. 439)-----	26. 54
Kasson Farms Canal Inlet, at sharp bend 1.5 miles above, at lower end and on center line produced of long reach running north and south, about 25 feet south of south (left) bank of river; iron post set in concrete (U. S. C. E. b. m. 440)-----	24. 95
Kasson Farms lower pump, on north levee at upper end of canal to first pumping lift, 1,100 feet south of south (left) river bank, 130 feet north of pump; iron post set in concrete (U. S. C. E. b. m. 441)-----	34. 02
Paradise Dam, 1.4 miles south of, 600 feet northwest of river, at lower end of Carson Long Reach, at north corner of corral on M. C. Wright place; iron post set in concrete (U. S. C. E. b. m. 442)-----	21. 35
Lathrop, at mile 78.1 of Southern Pacific R. R., at west end of viaduct leading to west end of bridge over San Joaquin River, on top surface of bearing stone on northwest pier, about 3.9 feet below top of rail; red metal disk 3 inches in diameter, lettered "U. S. C. & G. S. B. M."-----	27. 215
Brandt bridge, at south end abutment of; U. S. G. S. aluminum tablet stamped "21 1910 30" (U. S. G. S. b. m.)-----	21. 039

	Feet
Garwood bridge, 60 feet east of, north side of road at fence line; iron post stamped "7 1910" (U. S. G. S. b. m.)-----	7. 556
Stockton Canal, on landward slope of northerly levee of San Joaquin River, about 600 feet downstream from mouth of Stockton Canal; iron post set in concrete (U. S. C. E. b. m. 201)-----	13. 060
Stockton, west door of north entrance of San Joaquin County courthouse, in angle of wall; U. S. G. S. b. m. bronze tablet stamped "18-B"-----	18. 353

**Primary leveling by S. E. Blout in 1903 and by H. C. Semper in 1905**

**From Lathrop southwesterly along Southern Pacific R. R. to Midway**

Lathrop, 3.5 miles southwest of, 30 feet southwest of milepost 79, south side of track; iron post stamped "17.638 B"-----	17. 976
Milepost 75, 10 feet north of, south side of track; iron post stamped "22.181 B"-----	22. 477
Banta station, in front of freight house; top of rail-----	27. 2
Ellis, 1 mile west of, 4 feet north of milepost 69; iron post stamped "102.656 B" (Recovered by U. S. C. & G. S. in 1919)-----	102. 962

**From Ellis south to Day's farm**

Ellis, 4.8 miles south of, 1, 500 feet west of, at northwest angle of road to Ellis; iron post stamped "265 B"-----	264. 068
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**TESLA QUADRANGLE**

[Latitude 37° 30'-37° 45'; longitude 121° 30'-121° 45']

**ALAMEDA AND SAN JOAQUIN COUNTIES**

**Primary leveling by S. E. Blout in 1903 and by C. H. Semper in 1905**

**From Midway westerly along Southern Pacific R. R. to Livermore**

	Feet
Midway station, 5 feet east of milepost 64; iron post stamped "351.341 B"-----	351. 459
Milepost 60, 300 feet west of, south side of track, at road crossing; iron post stamped "539.602 B"-----	539. 640
Altamont, 5 feet west of milepost 56; iron post stamped "739.899 B"-----	739. 871
Milepost 52, 5 feet north of; iron post stamped "575.749 B"-----	575. 687

**From Livermore easterly along Southern Pacific R. R. to point 5 miles east of Carnegie, thence along highways to Day's farm**

T. 3 S., R. 2 E., northwest corner of sec. 23, at junction of Tesla and Mocho roads, east angle; iron post stamped "601 B"-----	601. 317
T. 3 S., R. 2 E., north side of sec. 24, south of road, nearly opposite large farm gate; iron post stamped "688 B"-----	688. 246
T. 3 S., R. 3 E., near center of sec. 20, 6.5 miles west of Tesla; 0.25 mile west of Al Allen's house, south of road, near fence; iron post stamped "B 832"-----	831. 965
T. 3 S., R. 3 E., sec. 27, 3.5 miles west of Tesla, halfway between old Richards mine and house, north of road; iron post stamped "B 1319"-----	1, 319. 600
Tesla, 25 feet east of entrance to Tesla Hotel; iron post stamped "No. 11,886 B"-----	885. 253
Tesla, in brick steps of Tesla Hotel; aluminum tablet stamped "882 B"-----	881. 442
T. 3 S., R. 4 E., south side of sec. 29, 2.9 miles east of Tesla, near San Joaquin and Alameda County line, 20 feet south of track, 200 feet east of railroad culvert; iron post stamped "700 B"-----	699. 436

	Feet
T. 3 S., R. 4 E., sec. 35, 1.1 miles east of Carnegie, 20 feet south of track, 5 feet north of road, opposite two old shanties; iron post stamped "540 B"-----	539. 337
From Livermore southeast through Arroyo Mocho to corner of Tps. 4 and 5 S., R. 4 E., thence along Tracy trail to point 1.1 miles east of Carnegie	
T. 3 S., R. 2 E., south side of sec. 36, 6.2 miles east of Livermore, near fence corner, at 48-inch oak tree, north of road; iron post stamped "784 B"-----	784. 090
T. 4 S., R. 3 E., N. E. $\frac{1}{4}$ sec. 8, at Mud Springs, 50 feet south of water trough, west side of road, at fence; iron post stamped "1412 B"-----	1, 412. 336
T. 4 S., R. 3 E., east side of sec. 13, 5.4 miles southeast of Mud Springs, at Fox ranch, at gate across county road, 5 feet west of road at township line; iron post stamped "2428 B 2 S"-----	2, 428. 178
T. 5 S., R. 4 E., north side of sec. 5, 600 feet south of Jones house, 20 feet west of road; iron post stamped "2415 B"-----	2, 415. 381
T. 4 S., R. 4 E., south side of sec. 10, 3.8 miles north of Corral Hollow Creek, on hogback at very rocky point, 6 feet east of trail; iron post stamped "2233 B"-----	2, 233. 349
Precise leveling by the U. S. Coast and Geodetic Survey in 1910-11	
From Midway west along Southern Pacific R. R. to point near Livermore	
Midway, about 1.5 meters east of milepole 63, about 150 meters east of station on south side of track, on Southern Pacific R. R. right of way; Geological Survey iron post stamped "351.341" (U. S. C. & G. S. b. m. O-8)-----	351. 459
Midway, in concrete base of Southern Pacific R. R. signal tower 625; red metal disk (U. S. C. & G. S. b. m. N-8)-----	422. 955
Cayley, 100 meters west of Southern Pacific R. R. milepole 60, 125 meters from east end of Cayley siding, in face of a rocky cut, about 1.2 meters above track; red metal disk (U. S. C. & G. S. b. m. M-8)-----	493. 427
Altamont, at Southern Pacific R. R. mileage 57.9, on north side of east entrance to Southern Pacific tunnel No. 1, about 0.2 meter from end of tunnel and 1 meter above track; red metal disk (U. S. C. & G. S. b. m. L-8)-----	590. 632
Altamont, 0.5 mile east of, on south abutment to Western Pacific R. R. crossing over Southern Pacific track, about 1 meter above Southern Pacific track; red metal disk (U. S. C. & G. S. b. m. K-8)-----	719. 237
Altamont, about 60 meters east of Southern Pacific R. R. station, between Southern Pacific main track and county pike, abreast of derailing switch to siding; Geological Survey iron post stamped "739.899" (U. S. C. & G. S. b. m. J-8)-----	739. 871
Altamont, at Southern Pacific R. R. mileage 53.7, on south head wall of Southern Pacific culvert 53G, about 0.6 meter below the track; red metal disk (U. S. C. & G. S. b. m. I-8)-----	716. 107
Livermore, at Southern Pacific R. R. mileage 52.2, on north abutment of overhead crossing of Western Pacific R. R. over Southern Pacific R. R., about 1.2 meters above Southern Pacific track; red metal disk (U. S. C. & G. S. b. m. H-8)-----	640. 688
Livermore, about 2 miles east of, at Southern Pacific R. R. mileage 49.1, on south abutment of overhead crossing of Western Pacific R. R. over Southern Pacific R. R., about 1 meter above Southern Pacific track; red metal disk (U. S. C. & G. S. b. m. G-8)-----	537. 128