DEPARTMENT OF THE INTERIOR
Franklin K. Lane, Secretary
United States Geological Survey George Otis Smith, Director

## Bulletin 654

## SPIRIT LEVELING IN NEVADA

## 1897 TO 1916, INCLUSIVE


R. B. MARSHall, Chief Geographer

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GEOLOGICAL SURVEY BENCH MARKS.
$A$, Tablet used in cooperating States. The State name is inserted at $G$. $B$ and $D$, Copper temporary bench mark, consisting of a nail and copper washer. $A, C$, and $E$, Tablets for stone or concrete structures. $F$, Iron post used where there is no rock.

# SPIRIT LEVELING IN NEVADA, 1897 TO 1916, INCLUSIVE. 

R. B. Marshall, Chief Geographer.<br>\section*{INTRODUCTION.}

Previous publication.-All results of spirit leveling in Nevada previously published by the United States Geological Survey in Bulletin 488 and all the results of later work are included in this report. The elevations are based on 1912 adjustment heights of bench marks along the precise-level lines of the United States Coast and Geodetic Survey.

Personnel.-The field work previous to 1903 was done under the general direction of R. U. Goode, geographer; that for 1903 to 1906 , inclusive, under E. M. Douglas, geographer; that for 1907 under R. B. Marshall, geographer; and the later work under T. G. Gerdine and G. R. Davis, geographers, under the general direction of R. B. Marshall, chief geographer. The names of the respective levelmen are given in the introductions to the several lists. The office work of computation, adjustment, and preparation of lists was done mainly by S. S. Gannett, geographer, under the general direction of E. M. Douglas, geographer.

Classification.-The elevations are classified as precise or primary, according to the methods employed in their determination. Precise elevations are determined by lines of levels run either in both forward and backward directions or by simultaneous double-rodded lines, a high-grade instrument being used and special precautions being taken in observations and reduction to correct errors and make the line continuously good throughout. Primary elevations are determined with the $Y$ level, precautions being taken against only the principal errors and the levels being run mostly in circuits of single lines. The allowable limit of error observed in the precise work already done by the Geological Survey in this State is represented in feet by $0.017 \vee \mathrm{D}$ and that for primary work by $0.05 \vee \mathrm{D}$, in which D is the length of the circuit in miles.

Bench marks.-The standard bench marks are of two forms. The first form is a circular bronze or aluminum tablet ( $C$ and $E, \mathrm{Pl} . \mathrm{I}$ ), $3 \frac{1}{2}$ inches in diameter and $\frac{1}{4}$ inch thick, having a 3 -inch stem, which is cemented in a drill hole in solid rock in the wall of some public building, a bridge abutment, or other substantial masonry structure. The second form ( $F, \mathrm{Pl}$. I), used where masonry or rock is not avail-
able, consists of a hollow wrought-iron post $3 \frac{1}{2}$ inches in outer diameter and 4 feet in length, which is set about 3 feet in the ground. The bottom is spread out to a width of 10 inches in order to give a firm bearing in the earth, and a bronze or aluminum-bronze cap is riveted upon the top of the post. A third style of bench mark, with abbreviated lettering ( $B$ and $D, \mathrm{Pl} . \mathrm{I}$ ), is used for unimportant points. This consists of a special copper nail $1 \frac{1}{2}$ inches in length driven through a copper washer $\frac{7}{8}$ inch in diameter. The tablets as well as the caps on the iron posts are appropriately lettered, and cooperation by a State is indicated by the addition of the State name ( $G, \mathrm{Pl} . \mathrm{I}$ ).

The numbers stamped on the bench marks described in the following pages represent the elevations to the nearest foot as determined by the levelman. These numbers are stamped with $\frac{3}{16}$-inch steel dies on the tablets or post caps, to the left of the word "Feet." The office adjustment of the notes and the reduction to mean sealevel datum may so change some of the figures that the original markings are 1 or 2 feet in error. It is assumed that engineers and others who have occasion to use the bench-mark elevations will apply to the Director of the United States Geological Survey, at Washington, D. C., for the adjusted values, and will use the markings as identification numbers only.

Datum.-All elevations determined by the United States Geological Survey and United States Coast and Geodetic Survey are referred to mean sea level, which is the level that the sea would assume if the influence of winds and tides were eliminated. This level is not the elevation determined from the mean of the highest and the lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level. Mean sea level is the average height of the water, all stages of the tide being considered. It is determined from observations made by means of tidal gages placed at stations where local conditions, such as long. narrow bays, rivers, and like features, will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At ocean stations the half-tide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea levels determined from observations in the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean.

The connection with tidal stations for bench marks in certain areas that lie at some distance from the seacoast is still uncertain, and this fact is indicated by the addition of a letter or word to the right of the word "Datum" on tablets or posts. For these areas corrections for published results will be made from time to
time as the precise-level lines of the United States Geological Survey, the United States Coast and Geodetic Survey, or other Government organizations are extended.
Topographic maps.-Maps of the following quadrangles wholly or partly in Nevada have been published by the United States Geological Survey up to July 1, 1917. Maps now in stock may be obtained for 10 cents each or $\$ 3$ for 50 on application to the Director of the Survey at Washington, D. C.:
*Amargosa region (Nev-Cal.). ${ }^{1}$
Ballarat (Cal.-Nev.). ${ }^{2}$
Bridgeport (Cal.-Nev.). ${ }^{8}$
Bristol Range.
Bullfrog special.
Camp Mohave (Ariz.-Nev.-(ial.).
Carson. ${ }^{4}$
Carson Sink.
Disaster
Ely special.
Furnace Creek (Cal.-Nev.). ${ }^{1}$
Goldfield special.
Granite Range.
Hawthorne (Nev.-Cal.).
Ivanpah (Cal.-Nev.). ${ }^{2}$
Kawich. ${ }^{1}$
*Lake Tahoe and vicinity (Cal.-Nev.).'

Las Vegas (Nev.-Cal.).
Lida (Nev.-Cal.). ${ }^{1}$
Long Valley.
Manhattan.
Markleeville (Cal.-Nev.).
Paradise.
Pioche (Nev.-Utah.).
Reno.
St. Thomas (Nev.-Ari\%.). silver Peak (Nev.-Cal.).
Tonopah.
Tonopah mining.
Wabuska.
Wadsworth.
Wellington (Cal.-Nev.).
Yerington.

## PRECLSE AND PRIMARY LEVELING.

Aura, Battle Mountain, Bridgeport, Bristol Range, Camp Mohave, Carson Sink, Cedar Pass, Cobre, Deeth, Elko, Ely Special, Furnace Creek, Gold Creek, Halleck, Hawthorne, Highland, Ivanpah, Jean, Kawich, Kumiva, Las Vegas, Lida, Lovelocks, Mill City, Palisade, Panaca, Pioche, Pyramid, Reno, St. Thomas, Silver Peak, Stonehouse, Tonopah, Wabuska, Wadsworth, Wellington, White Mountain, White Plains, and Winnemucca quadrangles.
CLARK, CHURCHILI, ESMERALDA, ELKO, EUREKA, HUMBOLDT, LANDER, LINCOLA, IMON, MINERAL, NYE, ORMSBY, STOREY, WASHOE, AND WHITE PINE COUNTIES.

## AURA QUADRANGLE.

$$
\text { [Latituce } \left.41^{\circ} 30^{\prime}-42^{\circ} ; \text { longitude } 116^{\circ}-116^{\circ} 30^{\prime} .\right]
$$

From a point 4.5 miles north of 0 wyhee south along highways to a point 1.1 miles south of that place, thence southwest 8.4 miles, thence northwest 6.1 miles to northeast corner of T. $46 \mathrm{~N} .$, R. 50 E., thence north to Idaho-Nevada State line.
Primary leveling by General Land Office, 1911-12. Elevations unchecked and therefore unreliable.
Owyhee, 3.88 wiles north of, 5 feet east of center of road, in sage Feet.
5.350 .1 brush flat; hub marked " E " 5. 350.12

[^0]Owyhee, 2.95 miles north of, on low summit, west of house at foot of Feet. mountain, 4 feet west of center of road; hub marked " $D$ "....... 5, 359.50
Owyhee, 2.22 miles north of, 0.25 mile northwest of missionary's cabin, 5 feet east of center of road; hub marked " $C$ "
$5,366.45$
Owyhee, 1.32 miles north of, 400 feet north of old cabin, 250 feet east of corrall, 60 feet north of junction, 7 feet west of road; hub marked "B "
$5,375.27$
Owyhee, 0.68 mile north of, 60 feet south of gate, in grass flat 6 feet east of center of road; 1 -inch hub marked "A"
$5,379.03$
Owyhee, 30 feet west of front door of Indian school and dormitory, 3 feet south of gate, 2 feet inside of fence; standard benchmark post No. 35 marked " 5430 "

5, 430. 801
Owyhee, 0.16 mile southwest of, in front of Indian house, west side of walk; marked rock
$5,403.78$
Owyhee, 0.74 mile southwest of, 1 foot east of fence line, near blazed post; red marked rock
$5,404.80$
Owyhee, 1.16 miles southwest of, at first turn to left after crossing bridge over Owyhee River, on right side of road to Owyhee, almost flush with ground; sapling hub $5,400,69$
Owyhee, 2 miles southwest of, on south side of small bridge, $\frac{1}{2}$ inch above floor marked red; spike
$5,399.79$
Owyhee, 3.2 miles southwest of, on southeast corner of floor of small bridge; spike

5, 396. 32
Owyhee, 3.3 miles southwest of, on floor on left side of bridge over irrigation ditch; knot
$5,401.86$
Owyhee, 4.6 miles southwest of, in sage-brush flat, 100 feet east of depression in road, 40 feet west of low summit, 1 mile northeast of Volcanic Cone, 4 feet north of center of road; standard benchmark post No. 34 marked " 5399 "
Owyhee, 5.8 miles southwest of, 3.5 feet north of center of road near base of Volcanic Cone, set flush with ground; top of 1-inch hub_-
Owyhee, 6.7 miles southwest of, 4 feet south of center of road, driven flush with ground; top of peg
$5,420.50$
Owyhee, 8.2 miles southwest of, 600 feet southwest of drain, northwest of center of road; peg-
$5,407.25$
Owyhee, 9.6 miles southwest of, 3 miles west of conical hill on south side of road 0.2 mile east of first hill on north side of road, 0.2 mile north of summit in road; 6 feet north of center of road; standard bench-mark post No. 33, stamped " 5422 "-

5, 423. 100
T. 46 N., R. 51 E., northwest corner, 4.8 miles southeast of, on side $\quad .58$
T. 46 N., R. 51 E., northwest corner, 3.7 miles southeast of, in creek bed; top of rock

5, 325. 88
T. 46 N., R. 51 E., northwest coruer. 2.9 miles southeast of, at east end of rocky point, 15 feet west of creek bed; stake

5, 408. 20
T. 46 N., R. 51 E., northwest corner, 1.8 miles southeast of; stake_-. 5, 515. 14
T. 46 N., R. 51 E., northwest corner, 1.5 miles southeast of, on summit

300 feet east of rim rock; stake
$5,580.70$
T. 46 N., R. 51 E., northwest corner, 0.9 mile southeast of ; stake_..-

5, 634. 33
T. 46 N., R. 51 E., northwest corner, 0.2 mile southeast of, in drain; stake
$5,690.08$
Tps. 46 and 47 N., Rs. 50 and 51 E., corners of secs. 1, 6, 31, and 36, in center of drain between two ridges 600 feet apart and 0.2 mile east of rim of saucer-like depression; standard bench-mark post

5, 721. 348

| , southeast corner, 0.5 wile | $84$ |
| :---: | :---: |
| T. 47 N., R. 51 E., sec. 30, 5 chains north of southw | 94 |
| T. $47 \mathrm{~N} ., \mathrm{R} .51 \mathrm{E} ., 0.6$ mile north of southwest corner of sec. | 2 |
| T. 47 N., R. 51 E., 20 feet north of northwest corner of sec. 3 | 4 |
| T. 47 N., R. 51 E., 0.7 mile north of southwest corner of sec. 19 ; sta |  |
| T. 47 N., R. 51 E., 10 chains north of southwest corner of sec. 18 , on side hill; stake $\qquad$ |  |
| T. 47 N., R. 51 E., 0.7 mile north of southwest corner of sec. 18,400 feet west of drain near pile of large rocks; stake |  |
| $47 \mathrm{~N} ., \mathrm{R} .51 \mathrm{E} ., 0.2$ mile north of southwest corner of sec. 7 , o west slope of rim; stake | $759.07$ |
| T. 47 N., R. 51 E., 0.5 mile south of northwest corner of | . 57 |
| T. 47 N., R. 51 E., 20 feet west of northwest corner of sec. 7; | 858. 18 |
| 47 N., R. 51 E., northwest corner of, 800 feet north of old lake bed. on small rise, 0.5 mile north of rocky swell on ridge; standard bench-mark post, marked " 5892 " $\qquad$ |  |

From point near Owyhee southeast along highway toward Mountain City.
Owyhee, 1.16 miles southeast of, on east side of road to Owyhee, at first turn in road to left after crossing bridge over Owyhee River, set almost flush with ground; sapling hub
Owyhee, 1.64 miles southeast of, west side of road; on rock 5, 418. 53
Owyhee, 2.16 miles southeast of, south side of road; on rock 5, 424. 82
Owyhee, 2.7 miles southeast of, on knoll, north of road, driven on bare
 100 yards north of Owyhee River, 200 yards west of junction with creek from north, 0.5 mile west of mountain with triple lava ledges, 20 feet southwest of southwest corner of small cabin; standard bench-mark post stamped " 5452 "

5, 453. 400
Owyhee, 4.23 miles southeast of, 30 feet southwest of second telephone pole from bottom; top of rock
$5,466.51$
Owyhee, 4.86 miles southeast of, east of big crag on west, in circle
of rocks north side of rocky crag; rock._-5, 474. 28

Owyhee, 5.6 miles southeast of, 1.5 miles above cabin, north of black
rock ledge, Island Butte south of creek good dam site, at second
ford of main creek; water level
Owyhee, 6.4 miles southeast of, 0.5 mile west of junction of roads, 0.25 mile north of rocky ledges, 200 yards south of high rocky point. 100 yards north of creek, 5 feet north of center of road, in granite boulder 4 by 3 by 3 feet; bronze tablet stamped " 5490 " 5, 491. 156
Owyhee, 7.8 miles southeast of', in road, by telephone pole; peg_--- 5, 513. 71
Owyhee, 9.4 miles southeast of, high up on rock_..............................530. 89
Owyhee, 9.40 miles southeast of, where road turns south, in telephone pole; spike

5, 538.12
Owyhee, 9.5 miles southeast of, 30 feet east of road sumımit ; on rock_ 5, 5.59. 61
Owyhee, 10.10 miles southeast of, east of road and 10 feet lower; on rocky ledge
$5,566.92$

From point 9.6 miles southwest of 0 wyhee south along highway 3.2 miles. (Single spur line; elevations unreliable.)
$\begin{array}{ll}\text { Owyhee, } 10.10 \text { miles southwest of, on bluff; rock } & \text { Feet. } \\ \text {, }\end{array}$
Owyhee, 12.4 miles southwest of, 4 feet west of center of road near rock bluff on west ; hub
$5,530.70$
Owyhee, 12.7 miles southwest of, 1 mile southwest of round-topped hill, on summit opposite low rocky bluff on west, 6 feet east of center of road; standard bench-mark post No. 32, stamped 5601"

5, 602. 157

## battle mountain euadrangle.

[Latitude $40^{\circ} 30^{\prime}-41^{\circ}$; longitude $116^{\circ} 30^{\prime}-117^{\circ}$.]
From Ladoga west along Southern Pacific R. R. to Battle Mountain. (Precise leveling by U. S. Coast and Geodetic Survey.)

Ladoga, 0.3 mile east of station sign, 75 meters east of milepost 504, 19 meters south of Southern Pacific R. R. track, in top of stone post ; bottom of square hole (C. \& G. S. b. m. G ${ }_{6}$ )

4, 661.211
Farrel, 120 meters east of station sign, 10 meters east of section tool house No. 29, 24 meters north of track, in top of stone post; bottom of square hole (C. \& G. S. b. m. He )
$4,629.075$
Mosel, 100 meters east of station sign, 90 meters west of milepole 493, 0.8 meter north of south line fence, 60 meters south of track, in top of stone post; bottom of square hole (C. \& G. S. b. m. I $\mathrm{I}_{6}$ ) $\qquad$ 4, 585. 086
Argenta, 100 meters east of west point of railroad siding, 1.5 meters north of south line fence, opposite frame ranch dwelling painted white, in top of stone post; bottom of square hole (C. \& G. S. b. m. J.
$-4,536.641$
Rosny, 30 meters east of station sign, 1.5 meters south of milepole 482, in top of stone post; bottom of square hole (C. \& G. S. b. m. K K ) - 4, 529. 016
Battle Mountain, on southwestern one of four central concrete pillars under railroad water tank, 50 meters west of station; redmetal disk (C. \& G. S. b. m. Les)
Battle Mountain, about 1.5 miles northwest of, at milepost 474, 51.5 meters north of track, 9.1 meters south of the north line fence, in top of stone post ; bottom of square hole (C. \& G. S. b. m. M ${ }_{5}$ ) --
$4,503.905$

## BRIDGEPORT QUADRANGLE.

[Latitude $38^{\circ}-38^{\circ} 30^{\prime}$; longitude $119^{\circ}-119^{\circ} 30^{\prime}$.]
From point on State line at Bridgeport-Sweetwater stake road east to junction of East Walker River and Bodie Creek. (Leveling by C. M. Weston in 1909.)

Bridgeport, 13.7 miles northeast of, on California-Nevada State line, survey of 1873, 25 feet west of road; iron post stamped " 5956 ".
Bridgeport, 15 miles northeast of, 700 feet north of Fulsome-Frederick's ranch, in field, 30 feet east of road, on boulder; chiseled square painted " 5895 "
$5,887.83$
Sweetwater, 5 miles southeast of, at P. J. Conway's ranch, 30 feet northward of northwest corner of house, at corner of fence: iron post stamped " 5821 "

Fletcher, $\mathbf{1 6 . 6}$ miles northwest of, on iron bridge over East Walker River, at southeast corner ; seventh outside bolt from bottom of east girder, painted white, marked " 5773 "

Feet. 5, 766.37
Fletcher, $\mathbf{1 5 . 2}$ miles northwest of, 30 feet west of sharp bend in road at west end of cut-off, 5 feet south of and 3 feet above road, on ledge; chiseled square painted " 5826 "

5, 819. 27
Fletcher, 14.4 miles northwest of, at summit in road, west of The Elbow, 15 feet south of road; iron post stamped " 5891 "
Fletcher, 13.6 miles northwest of, on east side of road, 75 feet east of deep draw and 125 feet south of bend in road, 10 feet from center of road, on 3 -foot boulder ; chiseled square painted " 5852 "-$5,844.85$
Fletcher, 12.9 miles northwest of, on steep grade west of The Elbow, at ditch crossing, 8 feet north of road, on boulder; chiseled square painted " 5842 "
The Elbow, teaming station, 3 feet from southwest corner of John Cumpton's house ; iron post stamped " 5631 " 5, 624. 095
Fletcher, $\mathbf{1 0}$ miles northwest of, at Wheeler's ranch, junction of Bodie Creek and East Walker River, 35 feet south of southwest corner of house; iron post stamped " 5585 "

5, 578. 204
BRISTOL RANGE QUADRANGLE.
[Latitude $38^{\circ}-38^{\circ} 15^{\prime}$; longitude $114^{\circ} 30^{\prime}-114^{\circ} 45^{\prime}$. ]
From point 4.8 miles north of Pioche along highways northwest to Bristol Pass, thence southwest to Bristol Well, thence south 6.1 miles. (Primary leveling by Roscoe Reeves in 1915.)

Pioche, 5.9 miles northwest of, 3.5 miles north of railroad crossing, 15 feet south of fork of road to "Prince Consolidated mine," east margin of road; iron post stamped " 5839 "
Pioche, 7 miles northwest of, 4.6 miles north of railroad crossing, 275 feet south of second-class road forks to southwest, west margin of road; chiseled square in limestone ledge, painted " 5863 " $\qquad$ 5, 862.48
Pioche, 8.4 miles northwest of, 6 miles north of railroad crossing, 0.3 mile north of second-class road forks to southwest, east margin of road; iron post stamped " 5937 "
Jack Rabbit mine, 4.4 miles southeast of, 50 feet south of summit of long rise in road, 10 feet west of road; copper nail in cedar stump painted " 5939 "
Jack Rabbit mine, 2.75 miles southeast of, at T road forks west, 20 feet northwest of center of forks, in top of lime rock placed flush with ground; bronze tablet stamped " 5953 "

5, 952.942
Jack Rabbit mine, 1.75 miles southeast of, 50 feet southwest of secondclass road crossing; point of small rock 3 inches high, painted " 5991 "
Jack Rabbit mine, 1 mile southeast of, in southeast corner of stone house, 1.3 feet above ground; scrap of iron driven between stones, painted " 6082"
Jack Rabbit mine, 200 feet east of saloon, 15 feet south of street, in limestone ledge, flush with ground; bronze tablet stamped "6,446"

6, 445. 823
Jack Rabbit mine, 1.4 miles north of, 0.3 mile south of road forks, top of hill, east side of road; copper nail in cedar stump painted "6,173"
6. 172. 33

Jack Rabbit mine, 2 miles morth of, in southeast corner of crossroads,
18 feet from center of crossing, on top of placed rock 3 inches ex- Feet. posed ; chiseled square painted " 6,139 " 6, 139. 00
Bristol Pass, highest point of, 110 feet northwest of road forks. 45 feet north of road, in limestone ledge flush with ground; bronze tablet stamped " 6,150 "
6. 149. 486

Bristol Pass, 0.6 mile west of, north margin of road, top of boulder
about $3 \frac{1}{2}$ feet high; painted circle, painted " 5,978 "
5,977. 72
Bristol Pass, 1.5 miles west of, 18 feet south of road, top of boulder 1 foot exposed; painted circle, painted " 5,821 "
$5,820.92$
Bristol Pass, 2.4 miles west of, 85 feet northeast of fork of road to Bristol mine, on rock flush with ground; painted circle, painted " 5,665 " 5, 664. 24
Bristol Well, in southwest corner of road forks, in northeast corner of stone house, $2 \frac{1}{2}$ feet above ground; bronze tablet stamped " 5,452 "
Bristol Well, 0.9 mile south of, in southwest corner of road forks, on top of placed rock about 7 inches exposed ; painted circle, painted " 5,586 " $\qquad$ $5,585,53$
Bristol Well, 2.3 miles south of, west margin of road, on top of small limestone rock; painted circle, painted " 5,659 "

5, 658. 62
Bristol Well, 3.2 miles south of, at forks of road to southeast, 10 feet west of road forks; iron post stamped " 5,733 "

5, 733. 247
Bristol Well, 4.1 miles south of, 15 feet north of road forks, west side of road, on top of limestone rock; painted circle, painted " 5,655 " 5, 655.06
Bristol Well, 5.2 miles south of, 20 feet north of fork of road to Pahroc Springs, west side of road; iron post stamped " 5,506 "
$5,505.926$
Bristol Well, 6.1 miles south of, 1 mile south of road forks, east side of road, top of rock; painted circle, painted " 5,446 "
$5,446.08$

## CAMP MOHAVE $1^{\circ}$ QUADRANGLE.

[Latitude $35^{\circ}-36^{\circ}$; longitude $114^{\circ}-115^{\circ}$.]
From point 15 miles southeast of Las Vegas along road south to Searchlight, thence southwest along Atchison, Topeka \& Santa Fe Ry, 5 miles to State line. (Primary leveling by L, F. Biggs in 1909.)
Mesquite Spring, 6.4 miles south of, in road forks, at junction of Searchlight and Railroad Pass roads, in lava boulder buried flush with ground; aluminum tablet stamped " 2049 B 1909 3"

2,047. 368
Mesquite Spring, 9.2 miles south of, east edge of road, on outcropping boulder; painted " 2408 " chisel point

2, 406.38
Mesquite Spring, 10.7 miles south of, 50 feet east of road, on summit between Mesquite Spring and Dry Lake, in lava rock; aluminum tablet stamped " 2617 B 19094 "

2, 615. 758
Dry Lake, 2.5 miles north of north edge of, east edge of road, at point of rocks, in ledge; chisel point, rock painted " 2102 "
2. 100.70

Dry Lake, north edge of, 100 feet east of forks of Eldorado Canyon and Searchlight roads, 50 feet north of well, in lava bonlder buried flush with ground; aluminum tablet stamped " 1712 B 19095 "... 1, 709.066
Dry Lake, south edge of, 40 feet south of road, in granite boulder buried flush with ground; copper bolt stamped " U. S. G. S. B. M. 1711 6"
Dry Lake, 5.2 miles south of, 30 feet south of road, in granite boulder 6 inches above ground; aluminum tatilet st:ampet ${ }^{2} 2038$ B 1909 :•

Dry Lake, 9 miles south of, 1,000 feet south of series of small washes, in bunch grass plot 25 feet east of road, in boulder, 6 inches above ground; aluminum tablet stamped " 2348 B 19098 "
$2,346.265$
Dry Lake, 11.6 miles south of, 50 feet east of road, on west bank of wash, in boulder 12 inches above ground; aluminum tablet stamped " 2735 B 19099 " 2, 783. 334
Dry Lake, $\mathbf{1 5 . 5}$ miles south of, 13.9 miles north of Searchlight, 15 feet east of road, in granite boulder 4 inches above ground; aluminum tablet stamped " 2949 B 190910 "
$2,947.327$
Searchlight, $\mathbf{1 1 . 7}$ miles north of, east edge of road, in base of yucca tree; spike with aluminum tag stamped " 3115 "
$3,113.17$
Searchlight, 10.7 miles north of, in forks of road, at junction of Nelson and Searchlight roads, in granite boulder 3 inches above ground; aluminum tablet stamned "3165 B 1909 11"
Searchlight, 7.2 miles north of, 20 feet west of road, at forks of wash, on north bank of wash, in boulder 6 inches above ground; aluminum tablet stamped " 3400 B 190912 "

3, 398. 641
Searchlight, 2.2 miles north of, 50 feet east of road, 1,000 feet east of Searchlight mine, in boulder; aluminum tablet stamped " 3730 B 190913 " $\qquad$ 3, 729. 029
Searchlight, 75 feet north of Atchison, Topeka \& Santa Fe Ry. station, 2 feet from telephone pole; iron post stamped " 3445 B 190914 " $3,443.785$
Searchlight, 0.5 mile west of, south edge of track, opposite milepost 22 , in base of sign post; spike with aluminum tag stamper " 3421 " $-3,419.96$
Searchlight, 1.6 miles west of, in base of milepost 21 ; spike with aluminum tag stamped " 3405 "

3, 404. 04
Searchlight, 2.6 miles west of, in base of milepost 20 ; spike with aluminum tag stamped " 3398 "
$3,396.38$
Searchlight, 3.6 miles west of, 100 feet west of milepost 19 , north edge of railroad right of way; iron post stamped " 3430 B 190915 "
$3,429.010$
Searchlight, 4.6 miles west of, in base of milepost 18 ; spike with aluminum tag stamped " 3500 "
3.499. 03

## CARSON SINK QUADRANGLE.

## [Latltude $39^{\circ}-40^{\circ}$; longitude $118^{\circ}-119^{\circ}$.]

From Hazen east along Southern Pacific R. R. to Fallon, thence south and east along highways to Salt Well Junction. (Primary leveling by T, P. Pendleton in 1914.)

Hazen, 1.3 miles east of, road crossing ; top of north rail 4,000. 6
Hazen, 1.6 miles east of, culvert 289 A ; top surface of south end of concrete pier.
$4,001.77$
Hazen, 2.2 miles east of, culvert 289 B , on south end of west abutment; marked "B. M. 4006.88 " (U. S. R. S. b. m.)
$4,003.46$
Hazen, 2.6 miles east of, culvert 290 A , on south end of west abutment; marked " 4012.52 " (U. S. R. S. b. m.) 4, 009. 14
Hazen, 3.2 miles east of, road crossing; top of north rail
Hazen, 4.7 miles east of, culvert 292 A, south end of west concrete abutment; top surface (U. S. R. S. b. m. marks not distinguished) - 4, 012. 34
Mahala, at signboard; top of south rail
$4,018.4$
Mahala. 0.5 mile east of, culvert 293 A , south end of west concrete abutment ; top surface (U. S. R. S. b. m. marks not distinguished) _ 4, 018. 13

Mahala, 0.9 mile east of, concrete culvert 293 B ; top surface of Feet. north end
Mahala, 2 miles east of, steel girder bridge 294 A , south end of west concrete abutment; top surface (U. S. R. S. b. m. marks not distinguished)

4, 033. 50
Mahala, 2.3 miles east of, south end of concrete culvert 295 A , top surface ; marked " 4028.02 " (U. S. R. S. b. m.)

4, 024. 59
Mahala, 3.2 miles east of, south end of concrete culvert 295 B; top surface

4, 015. 76
Mahala, 3.7 miles east of, south end of west concrete abutment to culvert 296 A ; top surface (U. S. R. S. marks not distinguished) --
$4,015.88$
Mirage, 0.6 mile west of, south end of concrete culvert 296 C ; top surface

4, 010. 70
Mirage, at signboard; top of south rail 4, 011.7
Mirage, 0.4 mile east of, south end of west concrete abutment of culvert 297 B , top surface; marked " 4013.68 " (U. S. R. S. b. m.) _-_ 4, 010. 28
Mirage, 1 mile east of, south end of west concrete abutment of culvert 298 B, top surface; marked " 4012.24 " (U. S. R. S. b. m.) _-_ 4, 008. 85
Mirage, 1.6 miles east of, culvert 299 A, south end of west concrete abutment; top surface, marked " 4002.21 " (U. S. R. S. b. m) $-\ldots-3,998.76$
Mirage, 2.7 miles east of, culyert 300 A , south end of west concrete abutment; top surface

3, 982. 56
Mirage, 3 miles east of, culvert 300 D , north end of west concrete
abutment; top surface, marked " 3986.24 " (U. S. R. S. b. m.) ----- 3, 982. is
Fallon, 1.8 miles west of, Carson River crossing, steel-truss bridge
301 C , south side of west concrete abutment; upper surface_...-- $3,982.85$
Fallon, 1.4 miles west of, Government Canal crossing, steel truss bridge 301 F , south end of west concrete abutment; top surface marked " 3981.20 " (U, S. R. S. b. m.)

3, 977. 77
Fallon, 0.9 mile west of, culvert 302 C , south end of west concrete
abutment; top surface, marked " 3971.06 "-----3. 967.62
Fallon, 120 feet southwest of Southern Pacific Co's depot, on southeast
corner of street intersection, on fire hydrant; period after word
"Corey"
Fallon, 1,200 feet east of depot, culvert 303 A , north end of east concrete abutment; top surface

3, 960.98
Fallon, 1.2 miles south of, 500 feet north of U. S. Experiment Farm, 200 feet east of road, on concrete wall of gate in canal ; aluminum tablet stamped "A 1914 "

3, 963.336

Fallon, 3.3 miles south of, at $T$ road to east, on east side of telephone pole at bend in line; spike

3, 957.70
Fallon, 4.3 miles south of, at $T$ road to east, on east side of road, in telephone pole; spike

3, 950. 34
Fallon, 4.9 miles south of, 4 feet south of Beckstead's store, about 35 feet sontheast of large cottonwood tree; iron post stamped " 3953.357 S.P." (Reclamation Service elevation 3953.357)

3, 949. 256
Fallon, 5 miles south by 1 mile east of, southeast corner of road intersection, in root of large cottonwood tree; spike

3, 938. 30
Fallon, 5 miles south by 2.1 miles east of, 245 feet east of William Erust's residence, north side of road, near base of more easterly of two cottonwood trees; spike
$3,982.42$

Fallon, 5 miles south by 3.1 miles east of, at $T$ road to north, in base Feet.

Fallon, 5 miles south by 4.2 miles east of, at T road to north, in base
of post common to two fence lines; spike_
Fallon, 5 miles south by 5.3 miles east of, north side of road, in cross
bar on old gate in ditch; spike
Grimes's ranch, south side of road, at northwest corner of fence in-
closing residence ; iron post stamped " 3927.8 S.P." (Reclamation Service elevation 3927.325)

3, 922.859
Junction, in center of forks of road, 5 feet west of signboard reading "Regent 26 miles"; iron post stamped " 39371908 "

3, 929.750
Salt Well, at northeast corner of Petersen's road house ; iron post stamped " 3964 "

3, 956.831
From point 10 miles east of Schurz to Rawhide. (Primary leveling by T. A Green in 1907-8.)
Schurz, 10 miles east and 4.69 miles north of, at summit, 10 feet west of road, in center of divide; iron post stamped " 4624 "
$4,616.988$
Rawhide, 10 miles northwest of, 8.25 miles west of Fallon-Rawhide road, 15 feet east of road, on west side of brown rocky butte about 100 feet high; iron post stamped " 4453 "
$4,445.718$
Rawhide, 5 miles northwest of, 3.15 miles west of Fallon-Rawhide road, 20 feet west of road, on west side of sandy wash; iron post stamped " 4921 "
$4,914.073$
Rawhide, 1.03 miles north of, 400 feet south of divide, 90 feet east of road, in base of square post marked "Angle Corner-Scalded Cat 1 and 2 "; spike marked " 5276 "
$5,268.72$
Rawhide, at southeast corner of Physicians and Surgeons Hospital, on south side; iron post stamped " 5152 "
$5,145.052$
From point near Eagleville north via Bermond stage station and Mountain Well to Stillwater.
Monte Cristo, 3.38 miles north of, 5 feet north of road, at point where road makes sharp bend to northwest, in large granite boulder; aluminum tablet stamped " 4936 "

4, 928. 795
Eagleville, 3.03 miles north of, 10 feet east of road; iron post stamped " 5370 "

5, 362. 738
Eagleville, 8.08 miles north of, 30 feet east of road, on east side of wash, in oblong rock; aluminum tablet stamped " 4710 "

4, 703. 093
Bermond, 7.55 miles south of, at junction with road running southwest to Frenchman's Spring, 30 feet west of forks, 50 feet northwest of signboard reading "Green Springs"; in rock, aluminum tablet stamped " 4397 "
$4,389.491$
Bermond, 2.46 miles south of, 20 feet west of road, on old dry lake bed; iron post stamped " 4155 "
$4,147.558$
Bermond, stage station, in northwest corner of cistern; top of rail, marked " 4163 "
$4,155.393$
Bermond, 2.55 miles northwest of, 30 feet east of road; iron post
stamped " 4249 "
Bermond, 7.64 miles northwest of, 40 feet east of road, in large oblong boulder; aluminum tablet stamped " 4611 "
Mountain Well, 2.98 miles southeast of, 50 feet east of road, 25 feet west of wash, 300 feet south of point where road parts to go up wash and over hill, in limestone rock; aluminum tablet stamped " 5312 "

Mountain Well, 2.04 miles west of, 40 feet north of road, on south side of wash, in large brown boulder 4 feet by 3 feet by 3 feet; aluminum tablet stamped " 5051 "
Stillwater, 6.85 miles east of, on west side of road, in large black boulder; aluminum tablet stamped " 4341 " $4,333.709$
Stillwater, 1.69 miles east of, at junction with road running northeast, at signboard reading "Lovelock 65 miles-Wonder 40 miles."
5 feet south of signboard; iron post stamped " 3906 " $\qquad$ 3, 899. 113
Stillwater, in southeast corner of hotel kept by Charles P. Cirac, on east side; aluminum tablet stamped " 3912 " 3, 904. 412
Stillwater, Cirac's hotel, at front entry ; top of stone doorsill 3, 902.11

## From Stillwater west toward Fallon (double-spur line). ${ }^{1}$

Stillwater, 1.66 miles west of, 1,000 feet west of Dalton's house, 40 feet north of road, 50 feet west of second-class road running north; iron post stamped " $3904.755-$ Feb. 20, 1908 " (Reclamation Service elevation 3904.755 feet)
Stillwater, 2.66 miles southwest of, 40 feet west of road; point on top of wooden hub driven in ground; marked " 3909.28 " (Reclamation Service elevation 3909.28 feet)
Stillwater, 3.77 miles southwest of, 100 feet north of road; point on top of wooden hub driven in ground ; marked " 3911.96 " (Reclamation Service elevation 3911.96 feet) $\qquad$ 3, 908.09
Stillwater, 6.59 miles southwest of, 40 feet north of road, 40 feet south of house; iron post stamped " 3921.6 datum S. P." (Reclamation Service elevation 3921.6 feet)
$3,917.681$
From point near Schurz northeast via Allen Spring, Junction, and Salt Well to Stillwater.

Schurz, 5.6 miles northeast of, 10 feet north of road; iron post stamped " 4340 "
$4,333.313$
Schurz, 10.58 miles northeast of, at top of divide, 10 feet east of road; iron post stamped " 4798 "
$4,790.674$
Allen Spring, 5.05 miles south of, at junction with road running
northeast, 30 feet east of forks, in black rock; aluminum tablet stamped " 4134 "
$4,126.608$
Allen Spring, at forks of road, 30 feet west of road junction; iron
post stamped " 4017 " --.--.-.-.
Allen Spring, 5.79 miles northeast of, 30 feet west of road, 250 feet south of point where road goes up to rim of old lake; iron post stamped " 3936 "

3, 928.574
Junction, 5 miles south of, about 2 miles west of main road to Schurz, 15 feet east of road; iron post stamped " 3916 "-

3, 908. 293
Junction, in center of forks of road, 5 feet west of signboard reading
" Regent 26 miles "; iron post stamped " 3937 "
3, 929.750
Salt Well, at northeast corner of Petersen's road house ; iron post
stamped " 3964 " --. $3,956.831$
Stillwater, 10.12 miles south of, 30 feet east of road; iron post stamped " 4038 "
$4,030.334$
Stillwater, 5.1 miles south of, 30 feet west of road, about 0.25 mile north of where road joins sandy road running north to Stillwater; iron post stamped " 3953 "

3,945. 935

[^1]
## From Bermond stage station east and north to IXL Canyon, thence west to Cox Canyon and south to Stillwater.

Fairview, 1 mile north of, at forks of road, 30 feet southeast of road Feet. junction; iron post stamped " 4431 "
Fairview, 5.37 miles northeast of, at junction of roads running northeast to Wonder, northwest to IXL, and southwest to Bermond, 30 feet southeast of four corners; iron post stamped " 4250 " $4,242.815$
Fairview, 10.24 miles north of, at junction with road running southwest to Mountain Well Road, 10 feet east of road junction; iron post stamped " 4091 "

4,083. 995
IXL Canyon signboard, 13.05 miles south of, 10 feet east of road, 800 feet north of dim road running east; iron post stamped " 3902 "
IXL Canyon signboard, 7.95 miles south of, 25 feet east of road, 200 feet south of dim road running northeast; iron post stamped " 3756 "

3, 749. 053
IXL Canyon signboard, 2.87 miles south of, 10 feet east of road; iron post stamped " 3591 "

3, 583. 860
IXL Canyon signboard, at forks of road, 50 feet south of, on west side of road, in granite rock; chiseled hole; rock marked " 3532 "- $3,524.25$
IXL Canyon signboard, 2.1 miles west of, 30 feet north of road, 300 feet east of mouth of canyon, in large flat granite boulder; aluminum tablet stamped " 4023 "
$4,015.810$
IXL Canyon and Cox Canyon, summit at head of, 125 feet north of trail, on top of divide, in limestone rock; aluminum tablet stamped " 6873 "
$6,865.531$
Cox Canyon, 600 feet west of Wilson's and Kelker's houses, 40 feet south of road, in large limestone boulder; aluminum tablet stamped " 5288 " $5,281.023$
Cox Canyon, at forks of Stillwater-Shady Run road, 5 feet north of signboard, at northwest angle of forks; iron post stamped " 3978 "- 3,970. 339
Desert Well, 70 feet southwest of, on west side of road, iron post stamped " 3939 "

3, 931.912
Desert Well, 5.03 miles southwest of, 60 feet west of road; iron post stamped " 3893 "

3, 886.053
Stillwater, 3.67 miles northeast of, 50 feet southeast of crossroads; iron post stamped " 3897.9 S . P." (Reclamation Service bench mark)

## CEDAR PASS QUADRANGLE.

[Latitude $41^{\circ}-41^{\circ} 30^{\prime}$; longitude $114^{\circ} 30^{\prime}-115^{\circ}$.]
From Valley Pass west along Southern Pacific R. R. to Wells. (Precise leveling by the U. S. Coast and Geodetic Survey.)

Valley Pass, 1 meter south of first telegraph pole east of station, about 15 meters south of track and within the turning wye, in top of stone post; bottom of square hole (C. \& G. S. b. m. Z3)
Valley Pass, near, about 3.7 telegraph poles east of milepole 640, 75 meters west of crossing, 29.3 meters north of track, 1.4 meters south of north line fence, on top of iron post; red-metal disk (C. \& G. S. b. m. A ${ }_{4}$ )

Icarus, 44 meters north of milepole 638, 60 meters north of main line of railway, 1.2 meters south of north line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. B4 )
lcarus, near, 50 meters west of milepole 365 , on east slope of hill at east end of deep cut, 28.9 meters north of track, about on level with track near set-off stand, 0.9 meter south of north line fence; redmetal disk on top of iron post (C. \& G. S. b. m. C $\mathrm{C}_{4}$ )
Pequop, in front of section hands' quarters, 1 meter north of milepole 633, 10 meters west of section car house No. 44 , in top of stone post ; bottom of square hole (C. \& G. S. b. m. D $\mathrm{D}_{4}$ )

6,145. 568
Fenelon, about 30 meters east of railroad station (628.4), 59.5 meters north of main track, in top of stone post; bottom of square hole (C. \& G. S. b. m. E $\mathrm{E}_{4}$ )
Holborn, near, 2 telegraph poles east of milepole 627, 28 meters north of track, 0.9 meter south of north line fence, red-metal disk on top of iron post (C. \& G. S. b. m. F4)6, 125. 293

Holborn, 40 meters east of section car house No. 43, 17.1 meters north of main track, 0.8 meter north of white telegraph pole which is 2 telegraph poles east of station sign, in top of stone post; bottom of square hole (C. \& G. S. b. m. G4)
Anthony, directly opposite station sign, 6 telegraph poles west of water tank, 29.9 meters south of main track, 1.2 meters north of south line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. $\mathrm{H}_{4}$ )

Moor, 10 meters west of station, 1 meter north of white telegraph pole, 15 meters north of main track and about 1.5 meters below it, in top of stone post; bottom of square hole (C. \& G. S. b. m. . I $)_{\text {- }}$
Cedar, 35 meters east of station sign, about 2 telegraph poles east and 0.7 meter north of milepole $614,16.8$ meters north of track, in top of stone post; bottom of square hole (C. \& G. S. b. m. J J ) 5,970. 037
Kaw, 1 meter north of milepole 612, 10.5 meters north of main track, in top of stone post; bottom of square hole (C. \& G. S. b. m. K ${ }_{4}$ )
Wells, 2 miles west of, 0.9 meter north of milepole 610,10 meters north of track; in stone post; bottom of square hole (C. \& G. S. b. $\mathrm{m} . \mathrm{L}_{4}$ )

5, 709. 221
Wells, 1 meter north of telegraph pole opposite east end of station, 12 meters north of main track, in top of stone post; bottom of square hole (C. \& G. S. b. m. M ${ }_{4}$ )
$5,628.145$
Wells, in western one of two northernmost concrete pillars under railroad water tank; red-metal disk (C. \& G. S. b. m. N 4 )
Wells, near, on east slope of hill at east end of deep cut, 3 telegraph poles west of milepole 607, 65.5 meters north of track, 1.3 meters south of north line fence, on top of iron post ; red-metal disk (C. \& G. S. b. m. $\mathrm{O}_{4}$ )
$5,616.465$

## COBRE QUADRANGLE.

[Latitude $41^{\circ}-41^{\circ} 30^{\prime}$; longitude $114^{\circ}-114^{\circ} 30^{\prime}$. ]
From Tecoma southwest along Southern Pacific R. R. to Cobre. (Precise leveling by the U. S. Coast and Geodetic Survey.)

Tecoma, near, in north side of granite post which marks the boundary between Utah and Nevada, 19.2 meters south of eastbound railroad track; red-metal disk (C. \& G. S .b. m. I $\mathrm{I}_{3}$ )

Tecoma, 0.4 mile east of station, 6 telegraph poles east of milepole 670 , opposite east post of rail rack, 15.3 meters south of eastbound track, 0.8 meter north of telegraph pole, in top of stone Feet.

Tecoma, near, 73.2 meters south of milepole $668,59.8$ meters south of eastbound main track, 1.3 meters north of south line fence, in top of stone post ; bottom of square hole (C. \& G. S. b. m. K K )
ecoma, near, 47 meters north of milepole $666,56.3$ meters north of westbound track, 0.9 meter south of north line fence; red-metal disk on top of iron post (C. \& G. S. b. m. L ${ }_{3}$ )
$4,820.108$
Akbar, 9 telegraph poles east of milepost 665 with two semaphore towers in range, 60.2 meters south of main track, 1 meter north of south line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. M ${ }_{3}$ )
$4,827.707$
Montello, 1 mile east of, 47 meters north of milepole $664,56.5$ meters north of eastbound line of railroad, 100 meters east of cattle guard, 1 meter south of north line fence, red-metal disk on top of iron post (C. \& G. S. b. m. $\mathrm{N}_{3}$ ) $4,846.158$
Montello, western one of two northernmost stone pillars under water tank, in top surface, red-metal disk (C. \& G. S. b. m. O O $4,874.560$
Montello, in southeast corner of grass plat in front of Southern Pacific Hotel, about 1 meter from corner, in top of stone post; bottom of square hole (C. \& G. S. b. m. P P )
$4,874.547$
Banvard, in line with west side of section house, 60 meters north of eastbound track of railroad, $\mathbf{1 . 3}$ meters south of north line fence, in top of stone post ; bottom of square hole (C. \& G. S. b. m. Q3) $4,976.079$
Noble, directly opposite station sign, on northwest side of track, at rear of signal tender's dwelling, about 1 meter southeast of northwest line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. R ${ }_{3}$ )
$5,117.398$
Ulin, directly opposite station sign, in a fence corner 59.2 meters northwest of eastbound line of railroad, 7 telegraph poles northeast of milepole 656, in top of stone post; bottom of square hole (C. \& G. S. b. m. S ${ }_{3}$ ) $5,262.526$
Wright, 43 meters northwest of milepost 654, 57.7 meters northwest of track, 1.2 meters southeast of northwest line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. T T )
$5,410.845$
Loray, opposite yellow dwelling house of section foreman, 1 telegraph pole west of section-car house 46, 6 telegraph poles east of milepole 652, 60.3 meters north of main track, 0.9 meter south of north line fence, in top of stone post ; bottom of square hole (C.\& G.S. b. m. U3) - 5, 596. 990
Omar, 0.6 meter north of eleventh telegraph pole east of milepost 647, 5.6 meters north of station sign, 15 meters north of main track, in top of stone post; bottom of square hole (C. \& G. S. b. m. Vs)
Cobre, 0.9 meter northeast of fourth telegraph pole northwest of railroad station, 14.2 meters northeast of main track, about 100 meters northwest of freight station, in top of stone post; bottom of square hole (C. \& G. S. b. m. W3 )
Cobre, 0.9 meter northeast of milepole 645, 14.4 meters northeast of railroad and about 1 meter below the track, in top of iron post; red-metal disk (C. \& G. S. b. m. X ${ }_{3}$ ) 5, 937. 678
Cobre, near, 7 telegraph poles east of milepost 643 , in top of north head wall of culvert No. 643A; top of iron spike (C. \& G. S. b. m. Y $\mathbf{3}^{\prime}$ ) - 6, 007.370

DEETH QUADRANGLE.
[Latitude $41^{\circ}-41^{\circ} 30^{\prime}$; longitude $115^{\circ}-115^{\circ} 30^{\prime}$.]
From Wells west along Southern Pacific R. R. to Natchez. (Precise leveling by the U. S. Coast and Geodetic Survey.)
Wells, near, at milepole 606, 1 meter south of north line fence, 27.7 meters north of track and about 1.5 meters below it, on top of iron post, red-metal disk (C. \& G. S. b. m. P ${ }_{4}$ )

Feet.
Alazon, 4.4 telegraph poles east of Southern Pacific R. R. milepole 604, 0.25 mile west of station sign, 28 meters north of track, 32.4 meters north of Western Pacific track, and 0.9 meter south of its north line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. Q4)

Tulasco, near, on Southern Pacific R. R., near Starr on Western Pacific Ry., at Southern Pacific milepole 600, 4.5 telegraph poles west of Western Pacific milepole 709, 29.1 meters south of Western Pacific track, 33.5 meters south of Southern Pacific track, 1.3 meters north of south line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. R ${ }_{4}$ )

5, 503. 263
Nardi, near, 0.5 mile west of west end of siding, 12 telegraph poles west of Southern Pacific milepole 595, 18 telegraph poles west of Western Pacific milepole 704, 75 meters west of signal tower 5948, and 27.9 meters north of Southern Pacific track, 32.3 meters north of Western Pacific track and 0.9 meter south of its north line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. S $\mathbf{S}_{4}$ ) -
Deeth, about 1 mile east of, about 200 meters west of point where Southern Pacific R. R. begins to diverge from Western Pacific Ry., 3 telegraph poles west of Southern Pacific milepole 592, 7 telegraph poles west of Western Pacific milepole 701, 4.3 meters south of Southern Pacific track, 5.6 meters north of Western Pacific track, on top of iron post; red-metal disk (C. \& G. S. b. m. T4) 5,352. 069
Deeth, 0.5 mile west of Southern Pacific R. R. station, 35 meters east of west end of siding, 0.7 meter south of first telegraph pole east of signal tower 590.5 , 15.5 meters south of main track, on top of iron post; red-metal disk (C. \& G. S. b. m. U4)
$5,334.707$
Natchez, 4 telegraph poles east of milepole 587 , in range with signal towers 5871 and 5872, 17.4 meters south of Southern Pacific R. R. track, 1.7 meters south of south line fence, outside right of way, on top of iron post; red-metal disk (C. \& G. S. b. m. V4) $5,295.721$

## ELKO QUADRANGLE.

[Latitude $40^{\circ} 30^{\prime}-41^{\circ}$; longitude $115^{\circ} 30^{\prime}-116^{\circ}$.]
From Elburz southwest along Southern Pacific R. R. to Vivian. (Precise leveling by the U. S. Coast and Geodetic Survey.)
Elburz, 2.8 meters north of milepole 575, 18.9 meters north $\mathrm{o}_{\mathrm{L}}$ track 20 meters west of section car house No. 38 , in top of stone post; bottom of square hole (C. \& G. S. b. m. X ${ }_{4}$ )
$5,204.645$
Elburz, near, in face of rock at east end of tunnel No. 5, north of track and about 0.6 meter above it; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{Y}_{4}$ ) $5,184.698$
Ryndon, 100 meters east of station, 12 meters south of track, 10 meters north of Western Pacific Ry. track, 1 meter west of a telegraph pole, in top of stone post; bottom of square hole (C. \& G. S. b. m. $\mathrm{Z}_{4}$ )
$5,158.467$

Ryndon, near, in top surface of west abutment of bridge No. 25 , over Humboldt River, 300 meters east of tunnel No. 3, south of track; Feet. red-metal disk (C. \& G. S. b. m. A ${ }_{5}$ ) $5,153.080$
Osino, 50.7 meters east of section car house No. $36,0.9$ meter east of telegraph pole, 30.3 meters north of main track, in top of stone post; bottom of square hole (C. \& G. S. b. m. Bs)
$5,133.717$
Coin, 6.8 meters north of Southern Pacific R. R. milepost 562,21 meters north of main track, about 0.25 mile northeast of Western Pacific milepost 670, in top of stone post; bottom of square hole (C. \& G. S. b. m. Cs) $5,091.519$
Elko, about 2 miles east of, 11.8 meters north of milepole $560,23.5$ meters north of Southern Pacific R. R. track, 1.5 meters south of fence, on top of iron post; red-metal disk (C. \& G. S. b. m. D ${ }_{5}$ ) --
Elko, about 0.75 mile east of, 8 telegraph poles east of milepole 558 , 58.8 meters north of Southern Pacific R. R. track, 1.1 meters south of the north line fence, and about 100 meters east of cattle guard, in top of stone post; bottom of square hole (C. \& G. S. b. m. E E )
Elko, in top surface at west end of lower step leading to south entrance of Elko County courthouse; aluminum tablet stamped U. S. G. S. (C. \& G. S. b. m. Fs)

5, 066. 860
Elko, 50 meters east of signal tower 567.3 at west end of Southern Pacific R. R. siding, 0.5 mile west of railroad station, 12.7 meters north of track and 1.3 meters north of a telegraph pole, in top of stone post; bottom of square hole (C. \& G. S. b. m. Gs) $5,055.288$
Elko, about 3 miles west of, 1.2 meters north of milepole $555,15.5$ meters north of track, on top of iron post; red-metal disk (C. \& G. S. b. m. $\mathrm{H}_{5}$ )

5, 040. 731
Avenel, near, 1.2 meters north of milepole 553 and 15.6 meters north of track, on top of stonc post; red-metal disk (C. \& G. S. b. m. Is) - 5, 030. 607
Avenel, 75 meters east of station sign, 30 meters west of crossing, 58.7 meters south of main track, 2.6 meters north of fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. Js) 5, 021. 296
Avenel, near, 49 meters north of milepole 550,64 meters north of track, 1.9 meters south of north line fence, on top of iron post; redmetal disk (C. \& G. S. b. m. Ks)
$5,009.691$
Moleen, near, 34 meters north of milepole 548, 48.3 meters north of track, 1.3 meters sou. of north line fence, on top of iron post; redmetal disk (C. \& G. S. b. m. L/5)
$5,008.382$
Moleen, 3 telegraph poles west of milepole 546, opposite station sign, 1 meter north of south line fence, 61.3 meters south of main track, in top of stone post; bottom of square hole (C. \& G. S. b. m. Ms) _-_ 4, 976. 266
Moleen, near, in top surface of west abutment of railroad bridge No. 24 over Humboldt River, north of track; red-metal disk (C, \& G. S. b. $\mathrm{m} . \mathrm{N}_{5}$ )

Tonka, near, at mileage distance 542.6 , in top surface of west abutment of bridge No. 21, over Humboldt River, south of track; top of an iron pin (C. \& G. S. b. m. O $\mathrm{O}_{5}$ )
$4,967.831$
Tonka, 3.1 meters north of milepole 542, 22.4 meters north of main track, 39.2 meters south of north line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. Ps)

4, 962.766
Tonka, near, in top surface of west abutment of railroad bridge No. 20 over Humboldt River, south of track; top of iron bolt (C. \& G. S. b. $\mathrm{m} . \mathrm{Q}_{5}$ )
Vivian, near, in top surface of east abutment of bridge No. 19 over Humboldt River, south of trac: ; top of iron bolt (C. \& G. S. b. m. $\mathrm{R}_{5}$ )
From Elko northwest toward Weiland 13.6 miles (part of single spur line). (Primary leveling by General Land Office in 1911-12. Elevations unchecked and therefore unreliable.)

Feet.

Elko, in front of Southern Pacific R. R. depot; top of north rail_-_- 5, 059. 7
Elko, west end of county courthouse, in lower step; aluminum tablet stamped " 5066 "
$5,066.860$
Elko, in front of Western Pacific Ry. depot; top of north rail 5, 056.0
Elko, 0.15 mile north of, under south side of Elko water tank, on concrete block; cross

5, 063, 00
Elko, 0.79 mile north of, southwest corner of bridge on Elko-Tuscarora
road, in top of post; nail.
Elko, 1.2 miles north of, on Elko-Tuscarora road, southeast corner of chicken yard, in fence post; nail
$5,177,33$
Elko, 1.5 miles north of, 20 feet west of road; on rock
5, 194. 76
Elko, 2.62 miles north of, 30 feet west of Elko-Tuscarora road, in 2-inch stake; nail
$5,292.58$
Elko, 3.14 miles north of, 60 feet east of Elko-Tuscarora road, 1 foot
from blazed telephone pole, in stake; nail_----.-5, 357.25
Elko, 3.1 miles north of, 60 feet east of road; standard bench-mark
post, marked " 5364 "--.----. $6,364.612$
Elko, 4.2 miles north of, 10 feet east of Elko-Tuscarora road, near spring, in 2 -inch stake; nail

5, 488.61
Elko, 5.05 miles north of, 10 feet east of Elko-Tuscarora road, in 2 -inch stake; nail

5, 631. 28
Elko, 5.9 miles north of, in ditch 10 feet west of Elko-Tuscarora road, in 2 -inch stake; nail
$5,807.48$
Elko, 6.2 miles north of, 30 feet east of Elko-Tuscarora road, in
2 -inch stake; nail
Elko, 6.5 miles north of, 15 feet west of Elko-Tuscarora road, on top of ridge ; standard bench-mark post, marked " 6009 "
$6,009,911$
Elko, 6.7 miles north of, on low hill 25 feet east of Elko-Tuscarora
road, in 2 -inch stake; nail_----- 6, 034. 75
Elko, 7.12 miles north of, 200 feet north of spring and 3 feet east of Elko-Tuscarora road, in 2 -inch stake; nail
$6,067.89$
Elko, 8.18 miles north of, 5 feet west of Elko-Tuscarora road, in 2-inch
stake; nail
Elko, 9.01 miles north of, 10 feet west of Elko-Tuscarora road, 5 feet from telephone pole, on top of ridge; standard bench-mark post, marked " 6755 "

6, 756. 336
Elko, 10.07 miles north of, 10 feet east of road, in 2 -inch stake;
Elko, 10.5 miles north of, in curve of road, 200 feet north of point


6,650.07
Elko, 11.5 miles north of, 20 feet east of road, on low ridge, in
2-inch stake; nail
Elko, 12.09 miles north of, on brow of low ridge, 20 feet east of road; standard bench-mark post.

6, 489. 026
Elko; 12.5 miles north of, 5 feet east of drain, in 2-inch stake; nail_- 6, 389.9

## ELY SPECIAL QUADRANGLE.

## [Latitude $39^{\circ} 14^{\prime}-39^{\circ} 18^{\prime}$; longitude $114^{\circ} 53^{\prime}-115^{\circ} 02^{\prime} 30^{\prime \prime}$.]

Railroad datum, not 1912 adjustment. The leveling was done in 1906 by Fred McLaughlin.

## From Ely to Lane City.

Ely, in north face of new courthouse, in east pillar of stone steps; Feet. aluminum tablet stamped " 6422 R . R." 6, 421.749

Ely, 3 miles west of, 300 feet north of Watsons Spring, and 150 feet
north of Siliman's house, in large rock; aluminum tablet stamped
" 6596 "
6, 595.845

Lane City, in base of flagpole; spike 6, 553. 808

From Lane City to point 1 mile south of Copper Flat.
Ely, 6 miles west of, 30 feet west of road, in granite rock; aluminum tablet stamped " 6766 "

6, 765. 762
Copper Flat, 190 feet northeast of concrete reservoir, 175 feet north of southeast corner post of Star claim, bears S. $17^{\circ} 23^{\prime}$ E., 1,060 feet, from corner of secs. $9,10,15$, and 16 , T. 16 N., R. 62 E., in concrete pier 18 inches square standing 1 foot above ground; aluminum tablet stamped " 7169 " 7, 169.325

FURNACE CREEK QUADRANGLE.

## [Latitude $36^{\circ}-37^{\circ}$; longitude $116^{\circ}-117^{\circ}$.]

From Pioneer southeast along Las Vegas \& Tonopah R. R. to Amargosa. (Precise leveling by U. S. Coast and Geodetic Survey.)
Pioneer, 3 miles south of, 1 telegraph pole south of milepole 146 , 10 meters west of Bullfrog Goldfield R. R. tracks, on the railroad right of way, opposite a farm house 400 meters west of tracks; redmetal disk in top of stone post (C. \& G. S. b. m. J J ${ }_{18}$ )

3,679. 648
Hot Springs, 0.75 mile south of, 10 meters west of milepole 149 , 20 meters west of Bullfrog Goldfield R. R.; red-metal disk in top of stone post (C. \& G. S. b. m. K ${ }_{18}$ )
$3,528.143$
Beatty, 2 miles north of, 3 meters south of milepole 152,15 meters west of Bullfrog Goldfield R. R. tracks, 50 meters south of crossing of road running toward twin farm houses 250 meters east of tracks; red-metal disk in top of stone post (C. \& G. S. b. m. I $\mathrm{I}_{16}$ ) __ 3, 396. 762
Beatty, 100 meters north of station, 50 meters west of crossing of Tonopan \& Tidewater R. R., 20 meters south of crossing of road running up town, 0.5 meter east of fence line; red-metal disk in top of stone post (C. \& G. S. b. m. M $\mathrm{M}_{16}$ )
$3,284.117$
Beatty, in ravine, 100 feet south of principal street, 500 feet north of Beatty Ice \& Manufacturing Co.'s plant, in ledge; aluminum tablet stamped " 31 U. S. G. S." (C. \& G. S. b. m. N 18 )
$3,307.831$
Beatty, 2 miles south of, 0.5 mile south of junction of Las Vegas \& Tonopah R. R. and Tonopah \& Tidewater R. R., 11 telegraph poles and 25 meters north of milepole 116, 15 meters west of Las Vegas \& Tonopah R. R. tracks ; red-metal disk in top of stone post (C. \& G. S. b. m. O ${ }_{16}$ )
$3,167.946$
Beatty, 5 miles south of, 20 feet north of milepost 113 , iron post stamped " 3002 U. S. G. S." (C. \& G. S. b. m. P ${ }_{18}$ )

3, 000.706

Beatty, 8 miles south of, 10 feet east of milepost 110 ; iron post Feet. stamped " 2865 U. S. G. S." (C. \& G. S. b. m. Q ${ }_{16}$ ) -------------2, 2, 863.331
Beatty, 11 miles south of, 10 feet north of milepole 107 ; iron post stamped " 2755 U. S. G. S." (C. \& G. S. b. m. R ${ }_{16}$ )

2, 753. 013
Beatty, 14 miles south of, 10 feet north of milepole 104 ; iron post stamped " 2664 U. S. G. S." (C. \& G. S. b. m. S ${ }_{16}$ )

2, 662. 468
Beatty, 17 miles south of, 10 feet north of milepole 101 ; iron post stamped " 2575 U. S. G. S." (C. \& G. S. b. m. T ${ }_{16}$ )
$2,573.837$
Rosewell, 2 meters east of tracks, in south end of west footing of Las Vegas \& Tonopah R. R. water tank; center of outlined square (C. \& G. S. b. m. U ${ }_{16}$ )
$2,589.532$
Rosewell, 2 miles sontheast of, 10 feet northeast of milepole 98 , iron post stamped " 2587 U. S. G. S." (C. \& G. S. b. m. V 16 )

2,585. 149
Rosewell, 3 miles southeast of, 15 meters west of Las Vegas \& Tonopah R. R. tracks, 10 meters north of milepole 97 ; red-metal disk in top of stone post (C. \& G. S. b. m. W ${ }_{16}$ )
$2,565.845$
Rosewell, 5 miles southeast of, 10 feet north of milepost 95 ; iron post stamped " 2582 U. S. G. S." (C. \& G. S. b. m. X ${ }_{18}$ )
Rosewell, 8 miles southeast of, 10 feet north of milepost 92 ; iron post stamped " 2648 U. S. G. S." (C. \& G. S. b. m. Y Y 18 )

2,581. 097

Rosewell, 12 miles southeast of, 10 feet east of milepole 88 ; iron
post stamped " 2658 U. S. G. S." (C. \& G. S. b. m. Z Z 16 )
2, 646. 304 $2,656.947$
Amargosa, 11.5 miles northwest of, 3 meters west of milepole 86, 15 meters south of Las Vegas \& Tonopah R. R. tracks; red-metal disk in top of stone post (C. \& G. S. b. m. A A )

2, 794. 643
Amargosa, 9.6 miles west of, 210 feet north of milepole 84 ; iron post stamped " 2843 U. S. G. S." (C. \& G. S. b. m. B B 17 )
Amargosa, 5.6 miles west of, 10 feet north of milepole 80 ; iron post stamped " 2762 U. S. G. S." (C. \& G. S. b. m. C 17 )

2, 759. 762
Amargosa, 3.5 miles west of, 5 meters west of milepole 78, 15 meters south of Las Vegas \& Tonopah R. R. tracks, red-metal disk on top of stone post (C. \& G. S. b. m. D 17 )

2, 755. 828
Amargosa, 1.6 miles west of, 10 feet north of milepole 76 , iron post stamped " 2765 U. S. G. S." (C. \& G. S. b. m. E 17 )

2,763. 754
Amargosa, 150 meters east of station and 10 meters north of Las Vegas \& Tonopah R. R. tracks, in southwest footing of well derrick; red-metal disk (C. \& G. S. b. m. F ${ }_{17}$ )

2, 777. 380
Amargosa, about 2.4 miles east of, 10 feet north of milepole 72 ; iron post stamped " 2840 U. S. G. S." (C. \& G. S. b. m. G17)

2, 838. 764
Amargosa, about 4.4 miles east of, 10 meters south of milepole 70, 25 meters south of Las Vegas \& Tonopah R. R, tracks; red-metal disk on top of stone post (C. \& G. S. b. m. H $\mathrm{H}_{17}$ )

2,896. 812
Amargosa, about 6.4 miles east of, 10 feet north of milepole 68 ; iron post stamped " 3034 U. S. G. S." (C. \& G. S. b. m. I $\mathrm{I}_{17}$ )
$3,032.678$
Amargosa, about 10.4 miles east of, 10 feet north of milepole 64 ; iron post stamped " 3320 U. S. G. S." (C. \& G. S. b. m. J 17 )

3, 318. 491
From Pahrump northwest along road to point on State line west of Kings Spring. (Primary leveling by L. F. Biggs in 1907.)
Pahrump, 5.8 miles west of, 600 feet north of Sixmile Spring, west point of rock hill at entrance of cave, in ledge; aluminum tablet stamped " 2566 B 1907 "

2, 564.587
Kings Spring, 6.6 miles east of, 20 feet south of road, in ledge; aluminum tablet stamped " 2503 B 1907 "
$2,502.296$
Kings Spring. 150 feet north of, in ledge; aluminum tablet stamped Feet. " 2315 B 1907 " ..... $2,314.044$
Kings Spring, 4.4 miles west of, at junction of roads; iron post stamped " 2172 B 1907 " ..... $2,171.985$
From Kings Spring north toward Amargosa.
Amargosa, 12.3 miles south of, 200 feet north of road, in ledge;aluminum tablet stamped " 2488 B 1907 "$2,487.059$
Amargosa, 8 miles south of, in bed of dry lake, 40 feet north of road; iron post stamped " 2331 B 1907 " ..... $2,329.387$
From point on State line near Daylight Springs, Cal., northeast along road to Bullfrog.
Bullfrog, 4.6 miles south of, 20 feet east of road; iron post stamped " 3560 B 1907 " ..... $3,568.486$
Bullfrog, 1.5 miles south of, 20 feet east of road; iron post stamped "3472 B 1907" ..... 3, 480.185
Bullfrog, southeast corner of Senator Stewart's land office; iron post stamped " 3575 100" ..... 3, 569. 734
From Bullfrog southeast along Las Vegas \& Tonopah R. R. via Amargosa to point $\mathbf{1 4 . 4}$ miles east of Amargosa.Bullfrog, 4.6 miles southeast of, 1,000 feet southeast of South Bullfrogsaloon, at junction of road; iron post stamped " 3139 B 1907 "3,137. 262
Amargosa, 14.4 miles east of, 10 feet north of milepost 60 ; iron post stamped " 3628 B 1907 " ..... 3, 627.171
From point 2.2 miles northwest of Currie Well (Mud Springs) southeast toBullfrog. (Primary leveling by Ress Philips in 1905.)Mud Springs, 2.2 miles north of, 30 feet east of road, on south side ofdeep ravine; iron post stamped " 25 "$4,392.499$
Mud Springs, at stage station, 3 feet north of northeast corner of office; iron post stamped " 26 " ..... $4,399.499$
Mud Springs, 3 miles south of, on summit, 50 feet east of road, 12 feet south of telephone pole; iron post stamped " 27 " ..... $4,638.730$Original, 0.5 mile southeast of, at forks of roads on small ridge be-tween two ravines; iron post stamped " 28 "3, 848. 613
From Bullfrog southeast 1.6 miles, thence northeast to Beatty.

Beatty, 1.5 miles west of, 800 feet east of Beatty-Bullfrog and BeattyRhyolite roads, 15 feet south of road, in boulder; aluminum tablet stamped " 30 "
Beatty, in ravine, 100 feet south of principal street, 500 feet north of Beatty Ice \& Manufacturing Co.'s plant, in ledge; aluminum tablet stamped " 31 "3, 307. 831

From road fork west of Beatty west via Montgomery-Shoshone mine and Rhyolite to Bullfrog.
Montgomery-Shoshone mine, 100 feet north of boarding house, on summit, 200 feet south of road, in boulder; aluminum tablet stamped " 32 "
Rhyolite, under high black ledge, at foot of dump of Bullfrog Mining Co.'s tunnel, 30 feet south of bottom of wash; aluminum tablet stamped " 33 "

From road forks 1.8 miles west of Bullfrog north to Goldbar, thence southwest to point 3.3 miles west of Bullfrog.

Goldbar, 2 miles east of, on summit 1 mile west of Buck Springs, 1.5 miles north of Original, 20 feet south of Goldbar road; iron post stamped " 34114 "

Feet. GOLD CREEK QUADRANGLE.
[Latitude $41^{\circ} 30^{\prime}-42^{\circ}$; longitude $115^{\circ} 30^{\prime}-116^{\circ}$.]
Near Mountain City. (Primary unchecked leveling by General Land Office, 1911-12.)

Owyhee, 10.2 miles southeast of, 0.25 mile southwest of reddish-brown rock slide in ravine southwest of high peak, 400 feet northwest of road crossing of small stream, 150 feet southwest of Owyhee Creek, 6 feet southwest of road at summit, by large granite boulders east of road; standard bench-mark post marked " 5560 " $\qquad$ $5,561.605$
HALLECK QUADRANGLE.
[Latitude $40^{\circ} 30^{\prime}-41^{\circ}$; longitude $115^{\circ}-115^{\circ} 30^{\prime}$.]

## At Halleck, (Precise leveling by U. S. Coast and Geodetic Survey.)

Halleck, 106 meters north of Southern Pacific R. R. main track, 1.6 meters south of north line fence, in range with east gable of railroad station, about 1.5 meters above track, in top of stone post; bottom of square hole (C. \& G. S. b. m. W4)

5,232. 178
HAWTHORNE QUADRANGLE.
[Latitude $38^{\circ}-39^{\circ}$; longitude $118^{\circ}-119^{\circ}$.]
From point near Schurz southeast along Southern Pacific R. R. to Redlich. (Precise leveling by U. S. Coast and Geodetic Survey.)

Schurz, about 5.5 miles northwest of, 1 meter south of milepole 349 , 8 meters south of Southern Pacific R. R. track; red-metal disk in top of iron post (C. \& G. S. b. m. Li1)
$4,326.104$
Schurz, about 2.5 miles northwest of, 1 meter south of milepole 382 , 7 meters south of track; red-metal disk in top of iron post (C. \& G. S. b. m. $\mathrm{M}_{11}$ )
$4,136.360$
Schurz, about 1 mile northwest of, 15 meters south of track, in concrete of Government irrigation ditch; red-metal disk (C. \& G. S. b. m. $\mathrm{N}_{11}$ )
$4,131.754$
Schurz, 200 feet west of station, 60 feet south of railroad, at northeast corner of Nevada Mercantile \& Supply Co.'s store; iron post stamped " 4130 " (store has recently burned to the ground) U. S. G. S. (C. \& G. S. b. m. O ${ }_{11}$ )
$4,122.465$
Schurz, 300 feet northwest of slaughterhouse, 20 feet south of road; iron post stamped " 4130 " (B. M. is now east of slaughterhouse) (C. \& G. S. b. m. $P_{11}$ )
$4,122.488$
Schurz, in concrete footing of northwest central pillar of railroad water tank, in top of stone post; bottom of square hole (C. \& G. S. b. m. Q Q $4,123.082$
Schurz, 0.5 miles southeast of, in west end of south side of concrete culvert under track; red-metal disk (C. \& G. S. b. m. R R 11 ) 4, 119.381
Schurz, 2 miles southeast of, in south side of concrete culvert 356 A under track; copper bolt (C. \& G. S. b. m. $S_{11}$ )
$4,115.412$

Schurz, 4 miles southeast of, 10 meters east of milepost 358.8 meters south of track; red-metal disk on top of iron post (C. \& G. S. b. m. Tin)

Feet.
Schurz, 6 miles southeast of, 3 telegraph poles south of milepole 360 , 50 feet west of railroad, 15 feet west of milepole 72 ; iron post stamped " 4113 " (C. \& G. S. b. m. Uni $)$

4, 106. 334
Schurz, 8 miles southeast of, 3 meters north of milepole 362,8 meters west of track; red-metal disk on top of iron post (C. \& G. S. b. m. $V_{11}$ )
$4,116.658$
Schurz, 11 miles south of, 2 telegraph poles south of milepole 365,10 meters west of track, 2.41 miles north of (U. S. G. S.) Gillis, 50 feet west of tracks, 10 feet west of milepost 77 ; iro post stamped " 4176 " (C. \& G. S. b. m. Wii)
$4,168.771$
Gillis, 0.3 mile south of, 5 telegraph poles and 40 meters north of milepole 368, 10 meters west of track; red-metal disk on top of iron post (C. \& G. S. b. m. X X 11 )
$4,162.771$
Gillis, 2.25 miles south of, 2 telegraph poles south of milepole 370 ; iron post stamped " 4163 " (C. \& G. S. b. m. Y Y 1 )
$4,155.727$
Magnus, 3.5 miles north of, 8 meters west of track, south of large bay on Walker Lake; red-metal disk on top of iron post (C. \& G. S. b. $\mathrm{m} . \mathrm{Z}_{11}$ )
$4,107.528$
Magnus, 2 miles north of, near milepole 375 ; iron post stamped " 4114 " (U. S. G. S.) (C. \& G. S. b. m. A ${ }_{12}$ )

4, 106. 691
Magnus, 0.5 mile south of, 8 meters east of track near milepole $377 \frac{1}{2}$; red-metal disk on top of iron post (C. \& G. S. b. m. B ${ }_{12}$ )
Thorne, 4.5 miles north of, 2 telegraph poles south of milepole 380, 10 meters east of track; bronze tablet stamped "U. S. G. S. B. M." (C. \& G. S. b. m. C $\mathrm{C}_{12}$ )
$4,110.162$
Thorne, 1.5 miles northwest of, 2 meters south of milepole 383,12 meters west of track; red-metal disk on top of iron post (C. \& G. S. b. m. $\mathrm{D}_{12}$ )
$4,130.927$
Thorne, 1 mile west of, 1 meter north of old road to Hawthorne and 10 meters south of new road; iron post marked " 4133 " (C. \& G. S. b. m. E $\mathrm{E}_{12}$ )

Thorne, 4.75 miles southeast of, 3 telegraph poles and 20 meters south of milepole 389, 10 meters west of track; red-metal disk on top of iron post (C. \& G. S. b. m. F ${ }_{12}$ )
$4,424.417$
Thorne, 8.5 miles southeast of, 1 telegraph pole south of milepole 393 , and 10 meters west of track; iron post marked " 4478 " (U. S. G. S.) (C. \& G. S. b. m. G ${ }_{12}$ )
$4,471.838$
Thorne, 12 miles southeast of, 0.5 mile southeast of milepole 396,8 meters west of track; red-metal disk on top of iron post (C.\& G.S. b. $\mathrm{m} . \mathrm{H}_{12}$ )

Acme, 0.75 mile southeast of milepole 397, in foot plate of southeast pillar of railroad water tank; cross on bolt (C. \& G. S. b. m. $\mathrm{I}_{12}$ ) _-_ 4, 378. 535
Luning, 9.15 miles northwest of, near milepole 399, iron post stamped " 4399 " (U. S. G. S.) (C. \& G. S. b. m. J ${ }_{12}$ )

4, 392.314
Acme, 1 mile southeast of, 1 meter south of milepole 402,10 meters west of track; red-metal disk on top of iron post (C. \&. G. S. b. m. $\mathrm{K}_{12}$ )

Luning, 3.17 miles northwest of, one telegraph pole south of milepole 405,10 meters west of track; iron post stamped " 4561 " (U. S. G. S.) (C. \& G. S. b. m. I I2

4,554. 197

Luning, 40 meters northwest of station, 10 meters west of main Feet. track ; red-metal disk on top of iron post (C. \& G. S. b. m. M M 12 ) _-_ 4, 463. 846
Mina, 6 miles north of, near milepole 411 ; iron post stamped " 4464 U. S. G. S." (C. \& G. S. b. m. N ${ }_{12}$ )

4, 457.737
New Boston, 1 telegraph pole north of milepole 414, in footing of southeast pillar of railroad water tank; red-metal disk (C. \& G. S. b. m. $\mathrm{O}_{12}$ )

4, 497. 681
Mina, in southwest corner of parking space near station; iron post stamped " 45531907 " (C. \& G. S. b. m. P ${ }_{12}$ )
$4,546.349$
Mina, east of station, in concrete footing of northwest pillar of tall railroad water tank; red-metal disk (C. \& G. S. b. m. Q Q ${ }_{12}$ )
$4,545.319$
Mina, in west face of heavy concrete footing of southwest pillar of small railroad water tank; red-metal disk (C. \& G. S. b. m. R $R_{12}$ ) _- 4, 548. 652
Mina, 3 miles southeast of, 10 meters south of milepole 420 and 10 meters southwest of track; red-metal disk on top of iron post (C. \& G. S. b. m. $\mathrm{S}_{12}$ )

4, 581. 392
Tonopah Junction, in area between $\mathbf{Y}$ of Tonopah and Goldfield R. R. and Southern Pacific R. R., 20 meters south of $\log$ house, 60 meters northwest of Southern Pacific Co.'s water tank; red-metal disk on top of iron post (C. \& G. S. b. m. U $\mathrm{U}_{12}$ )
Tonopah, in northeast footing of pillar of Southern Pacific Co.'s water tank, 2 meters west of track; red-metal disk (C. \& G. S. b. m. $V_{12}$ )
$4,410.674$
Tonopah Junction, 3 miles south of, 5 meters north of milepole 3 ; iron post marked " 4584 " (U. S. G. S.) (C. \& G. S. b. m. X ${ }_{12}$ )

4,577. 491
From Tonopah Junction southwest along Southern Pacific R. R. to Sunland.
Tonopah Junction, 3.5 miles west of, 8 meters south of track at point where road to Belleville runs alongside railroad embankment; redmetal disk on top of iron post (C. \& G. S. b. m. $\mathrm{C}_{13}$ )
Belleville, in footing of southeast pillar of railroad water tank; redmetal disk (C. \& G. S. b. m. F ${ }_{13}$ )
$5,174.642$
Little Summit, 4 miles west of, 10 meters south of Southern Pacific R. R. tracks, 10 meters east of milepole 443 ; red-metal disk on top of iron post (C. \& G. S. b. m. J J 13 )
$5,670.645$
Basalt, 2 miles southwest of, 8 meters south of track, in line with telegraph poles where they cross track on line to Mount Montgomery ; red-metal disk on top of iron post (C. \& G. S. b. m. $M_{13}$ ) -- 6, 531. 312
From milepost 456 northeast along Southern Pacific R. R. to Tonopah Junction. (Primary leveling by D. H. Watson in 1913.)
Basalt, 5.5 miles southwest of, opposite milepost 456 ; top of north rail_ 6, 920.4
Basalt, 4.5 miles west of, on south side of most western loop of railroad climbing to Sunland, 40 feet east of track, 60 feet northeast of milepost 455 , in a rock; bronze tablet stamped " 68061913 "--6, 798. 327
Basalt, 1.08 miles southwest of, at road crossing; top of south rail_-_- 6, 462.1
Basalt, 0.71 mile southwest of, at road crossing; top of north rail_-_ 6. 421.4
Basalt, 80 feet south of station, 55 feet west of railroad, 350 feet north of water tank, in rock; bronze tablet stamped " 63471913 " (C. \& G. S. b. m. L ${ }_{43}$ )
${ }^{1} 6,339.390$
Basalt, 2.5 miles northwest of, at road crossing; top of rail_-.-.-- 6, 095. 1
Little Summit, 8.3 miles southwest of, 27 feet west of track, 60 feet southwest of milepost 446 , in rock; bronze tablet stamped " 5901 1913" (C. \& G. S. b. m. K ${ }_{13}$ )
${ }^{1} 5,893.440$

[^2]Little Summit, 4.25 miles southwest of, opposite milepost 443; top of Feet. rail
Little Summit, 3 miles southwest of, 30 feet east of wagon road, 40 feet southeast of crossing, in quartz rock; bronze tablet stamped " 5681 1913" (C. \& G. S. b. m. I ${ }_{13}$ )
Little Summit, 36 feet northwest of end of spur, 36 feet west of crossing sign, 48 feet west of road crossing, in summit of saddle, in rock; bronze tablet stamped " 5828 1913" (C. \& G. S. b. m. $\mathrm{H}_{13}$ ) ${ }_{---1}{ }^{1} 5,821.228$
Filben, 1 mile southwest of, opposite "Filben 1 mile" sign; top of rail
Filben, southwest corner of $\mathbf{V}$, between tracks, 20 feet south of wagon road, 12 feet southeast of crossing sign, in rock; bronze tablet stamped " 54551913 " (C. \& G. S. b. m. G ${ }_{13}$ )
${ }^{1} 5,447.899$
Filben, 0.18 mile northwest of, at road crossing; top of rail
Belleville, 1,055 feet south of road crossing, 60 feet west of deserted station, 25 feet west of tracks, 125 feet south of section foreman's house, 165 feet north of water tank, in large rock; bronze tablet stamped " 51781913 " (C. \& G. S. b. m. E E 13 )
${ }^{1} 5,171.131$
Belleville, 1 mile northeast of, in east end of culvert near "Belleville 1 mile" sign; railroad spike (C. \& G. S. b. m. Dis)
${ }^{1} 5,058.530$
Tonopah Junction, 4 miles south of, at road crossing; top of rail_.... 4, 874.3
Tonopah Junction, 3.06 miles southwest of, in base of north end of culvert 429 A ; railroad spike

4, 754. 00

Tonopah Junction, in southwest pier of railroad water tank; bolthead, marked "U. S. B. M." (C. \& G. S. b. m. W ${ }_{12}$ )
${ }^{1} 4,411.560$
Sodaville, 2.43 miles south of, 40 feet west of railroad, 90 feet south of road crossing, 566 feet north of milepost 433 ; iron post stamped " 44381907 " (C. \& G. S. b. m. T T12
${ }^{1} 4,431.841$
From Candelaria southeast to Columbus. (Primary leveling by C. R. Smith in 1897.)

Candelaria, in brickwork of front of post office; bronze tablet 5,659. 568
Candelaria, 2 miles south of, at Sodaville crossroads; top of iron post of guideboard

5, 314.00
Candelaria, 5.75 miles south of, in quartz outcropping on right side
of road at summit; bronze tablet stamped " 5394 "--.-.------ 5, 312. 249
Columbus, 2 feet west of southwest corner of E . Moleno's saloon; iron post stamped " 4625 "

4, 543. 200

## From Battle's Well west to Mina. (Primary leveling by T. A. Green in 1907-8.)

Battle's Well, 5.95 miles west of, 10 feet south of road, in large limestone boulder, aluminum tablet stamped " 5040 1907"

## Near Hawthorne.

Luning, 20.89 miles northwest of, 4.4 miles east of Hawthorne, 70 feet south of old railroad crossing, 10 feet south of wagon road, at forks of road; iron post stamped " 43491907 "

4, 342.330
Hawthorne, at northwest corner of old railroad freight station, now occupied by D. W. Earl \& Co. as a warehouse; iron post stamped "4334 1907 "
$4,327.357$

[^3]From Hawthorne along Southern Pacific R. R. to Schurz, thence along stage road east toward Rawhide.Feet.
Walker, in front of signboard; top of rail ..... 4, 109.1
Walker Lake, surface of water, September 27,1908 ..... 4,078. 0
Schurz, 4.96 miles east of, 25 feet south of road; iron post stamped " 4159 " ..... $4,151.672$
Schurz, 10.01 miles east of, 15 feet east of road, at north end of alkali flat; iron post stamped " 4057 " ..... $4,050.150$
From Rawhide to point 1.8 miles west of Kelly's Well.
Rawhide, 5.02 miles southeast of, 30 feet south of road; iron post stamped " 4300 " ..... 4, 293. 896
Murphy's Well, 4.08 miles east of, 30 feet south of road, at dry lake; iron post stamped " 4109 " ..... 4, 102. 228Hot Springs, 30 feet east of spring, in depression in ground; ironpost stamped " 4131 "$4,124.290$
Warner's Well, in east end of casing around well ; top of iron bolt marked " 4260 " ..... $4,252.90$
Warner's Well, 1.0 mile east of, 40 feet south of road; iron post stamped " 4263 " ..... 4, 256. 365
Warner's Well, 6.04 miles east of, 30 feet south of road; iron post stamped " 4366 " ..... $4,358.666$
Warner's Well, 11.07 miles east of, 20 feet south of road; iron post stamped " 4577 " ..... $4,569.544$

From Hawthorne west along stage road to State line. (Primary leveling by C. M. Weston in 1909.)

Hawthorne, 25 feet north of front entrance to old Esmeralda County courthouse, in northeast corner on east side; aluminum tablet stamped "4326 1907"
Hawthorne, 0.5 mile west of, near telephone line from Hawthorne to county hospital, 50 feet east of pole nearest small building north of line, on small boulder ; chiseled square painted " 4394 O"
Hawthorne, 1.6 miles west of, 35 feet southeast of southeast corner of yard around county hospital, on granite boulder, 9 inches above ground; chiseled circle painted " 45910 "
Hawthorne, 1.9 miles west of, 7 feet inside of east corner of fence around water tanks; iron post stamped " 4643 " $\qquad$ $4,635.96 \iota$
Hawthorne, 2.7 miles west of, 200 feet east of turn to Cory, 30 feet south of road, on rock; chiseled square painted " 48000 " $\qquad$ 4, 792.99
Hawthorne, 4.7 miles west of, on south side of north road to Lucky Boy, 10 feet from center of road, at foot of slope, on boulder; chiseled square painted " 53020 "
Hawthorne, 6.5 miles west of, 85 feet east of road, on point on ridge below which main road passes three times, 3 feet east of claim corner and 3 feet southwest of scrub pine; point on ledge painted "O"; stake painted " 6027 "

6, 020.25
Hawthorne, 7 miles west of, in lower part of town of Lucky Boy, about 200 feet south of mine shaft, 12 feet above and on south side of main road, on point of ledge; aluminum tablet stamped " 6226 "- 6, 219.042
Hawthorne, 7.7 miles west of, 12 feet north of northeast corner of Lucky Boy reservoir; iron post stamped " 6606 "

6,599. 198
Hawthorne, 8.6 miles west of, 20 feet south of short cut on main road, 8 feet higher than road; point on boulder painted " 6849 W "
$6,841.57$

Hawthorne, 10.8 miles west of, 25 feet west of spout under road in first dry channel east of Summit stage station, on boulder in ditch; Feet. chiseled square painted " 73620 "
Hawthorne, 11.4 nitles west of, at Summit stage station, at southwest corner of house; iron post stamped " 7511 "
$7,504.123$
Hawthorne, 12.6 miles west of, 1.2 miles west of Summit stage station, 12 feet south of road, and 17 feet north of telephone pole, on large granite boulder, 3 feet above ground; chiseled circle painted " 7732 W " $\qquad$ 7, 724.97
Hawthorne. 13.5 miles west of, 2.1 miles west of Summit stage station, south of road at summit, in base of telephone pole; spike painted " 80080 "
$8,001.02$
Hawthorne, 16.2 miles southwest of, at turn from Hawthorne-Bodie stage road to Yerington, 3 feet southeast of guidepost and 15 feet from either of $Y$ roads; iron post stamped " 7145 "

7,138. 175
Fletcher, 3.9 miles east of, ir Mud Spring Canyon, at foot of point of ridge on north side, 175 feet north of dry wash and 25 feet north of road; iron post stamped " 6396 "

6, 389. 182

Fletcher, on south side of road and about 75 feet northeast of northeast corner or house, just north of large spring; iron post stamped " 6100 ".

6, 092. 848
Fletcher, 2.1 miles southwest of, 30 feet west of Bodie Creek, on south side of road, on boulder; chiseled square painted " 6222 "
$6,215.57$
Fletcher, 3.4 miles southwest of, 150 feet east of old toll house, 50 feet north of Bodie Creek, 25 feet south of road, on large boulder; chiseled square painted " 6447 "
$6,440.34$
Fletcher, 4.3 miles southwest of, in Bodie Creek Canyon, on south side of road, at top of 4 -foot boulder ; chiseled square painted " 6652 "-- 6, 644. 74
Fletcher, 5.5 miles southwest of, at Del Monte stage station, at northwest corner of platform to old store ; iron post stamped " 6922 " 6, 915. 103
Fletcher, 6.7 miles southwest of, in Bodie Creek Canyon, on north side of road. on boulder; chiseled square painted " 7157 "

7,150. 62
Fletcher. 7.8 miles southwest of, in Bodie Creek Canyon, on north side of road, at foot of steeper grade, on boulder; chiseled square painted " 7422 "

7, 414. 87
Fletcher, 8.1 miles southwest of, on California-Nevada State line, survey of 1873,25 feet south of milepost 283,300 feet east of old stone house at Sunshine, 15 feet north of road; iron post stamped "7524"

7, 517. 124
From Del Monte to Aurora (spur line).
Aurora, 0.9 mile northwest of, 10 feet west of road, opposite 10 -foot cut, on 3 -foot boulder; chiseled square painted " 7246 "

7, 239. 86
Aurora, at southeast corner of post office ; iron post stamped " 7416 "-
7, 409. 234
From junction of East Walker River and Bodie Creek southeast to Fletcher.
Fletcher, 8.7 miles northwest of, on Bodie Creek, 1.3 miles upstream from Wheeler's ranch, at west end of creek, on 4 -foot toulder ; painted " 5660 "
$5,652.90$
Fletcher, 7.7 miles northwest of, on Bodie Creek. 2.3 miles unstream
from Wheeler's ranch, on south edge of creek and 20 feet west of 10 -foot boulder, on 6 -foot boulder; chiseled square painted " 5728 "

5, 720.72

Fletcher, 5.7 miles northwest of, about 500 feet southwest of Bodie

Creek and 250 feet east of foot of ridge, 20 feet west of dry channel, on boulder ; chiseled square painted " 5843 " $\qquad$
Feet.
5. 836.36

Fletcher, 4.8 miles northwest of, in pasture owned by G. A. Green, 100 feet west of high bank at sharp bend in Bodie Creek and 300 feet south of point where fence crosses south bank of creek, 3 feet east of wire fence ; iron post stamped " 5863 " $\qquad$ $5,855.883$
Fletcher, 3.2 miles northwest of, at G. A. Green's ranch, 7 feet south of front gate to front yard and 35 feet east of southeast corner of house; iron post stamped " 5948 "
$5,941.046$
HIGHLAND QUADRANGLE (NORTHWEST QUARTER OF PIOCHE QUADRANGLE).

## [Latitude $37^{\circ} 30^{\prime}-38^{\circ}$; longitude $114^{\circ} 30^{\prime}-115^{\circ}$.]

From Bennet Springs along highways northwest 30 miles, thence northeast to Stampede Pass, thence southeast to point near Point Mine. (Primary leveling by D. S. Birkett and Roscoe Reeves in 1915.)
Bennet Springs, 0.7 mile west of, 500 feet west of point where road reaches top edge of bench, 20 feet south of road, in base of cedar tree ; railroad spike marked " U. S. B. M. 5436 "
$5,436.36$
Bennet Springs, 2.4 miles west of, 1 mile east of summit on Delamar road, 35 feet north of road, in base of 16 -inch cedar stump; railroad spike marked " U. S. B. M. 5664 "

5, 663. 72
Bennet Springs, 2.9 miles west of, at fork in roads to Delamar and Ely Springs ; surface of ground

5, 743.7
Bennet Springs, 3.2 miles west of, 1,300 feet east of summit of Panaca-Delamar road, 250 feet west of fork of Delamar and Ely Springs roads, 200 feet north of Delamar road and 250 feet south of Ely Springs road, on top of boulder 4 feet high; bronze tablet stamped " 5763191523 "

5, 762. 992

Bennet Springs, 4.2 miles northwest of, 1.2 miles northwest of summit of Panaca-Delamar road, 50 feet east of Ely Springs road, in base of juniper tree; railroad spike marked " U. S. B. M. 5954 " $5,954.21$
Bennet Springs, 5.1 miles northwest of, 2 miles northwest of summit on Panaca-Delamar road, 5 feet east of Bennet Springs-Ely Springs road; top of boulder marked " U. S. B. M. 6162 "
$6,161,97$
Ely Springs, 7.2 miles southeast of, 7 miles northwest of Bennet Springs, at summit on Bennet Springs-Ely Springs road just before descending toward Dry Lake Valley, 4 miles northwest of PanacaDelamar road summit, 10 feet east of road; iron post stamped " 6135191524 " $\qquad$ $6,134.427$
Ely Springs, 5.75 miles southeast of, 900 feet east of point where road from summit leaves the wash, 4 feet south of road, in base of piñon tree ; railroad spike marked " U. S. B. M. 5756"

5, 755. 65
Comet mine, about 2 miles southwest of, 4 miles southeast of Ely Springs, in fork of roads leading to the mine and to Ely Springs, in boulder; bronze tablet stamped " 5615191525 "
$5,614.496$
Ely Springs, 3.25 miles southeast of, 30 feet north of forks in roads from Ely Springs east to Comet mine and southeast to Panaca, 1 foot east of road; top of black boulder, marked "U. S. B. M. 5615 "

5, 614. 93
Ely Springs, 1.25 miles southeast of, 0.3 mile east of present road leading to the springs, 150 feet west of old road; point on large red mass of lava rock, marked " U. S. B. M. 5599 "
$5,598.58$

Fly Springs, 0.5 mile southeast of, at top of small summit on road leading toward Panaca, 30 feet south of summit, 15 feet west of Feet. road, in juniper tree; railroad spike, scribed " U. S. B. M. 5705"--
Ely Springs, 50 feet north and 60 feet west of northwest fence corner of inclosure about reservoirs, 60 feet north of little stream; iron post, stamped " 5427191526 "

5, 705. 22

Ely Springs, 0.6 mile west of, down the wash, 70 feet north of road; top of large boulder, marked " U. S. B. M. 5268 "

5, 426. 737

Ely Springs, 1.2 miles west of, down the wash, 35 feet north of road; top of large white boulder, marked " U. S. B. M. 5108 "
$5,108,17$
Ely Springs, 1.8 miles west of, 0.2 mile northwest of rocky point at mouth of canyon leading to Ely Springs, on slope leading down to bottom of Dry Lake Valley, 20 feet south of road leading toward Stampe.le Pass ; top of large boulder, marked " U. S. B. M. 4977 "-4, 976.984
Dry Lake Valley, 6.5 miles southwest of fork of Pioche-Coyote Springs road and Ely Springs road, 2.9 miles northwest of Ely Springs, 10.75 miles southwest of Stampede Pass, along road, at foot of slope, at east edge of flat portion of the valley, 250 feet north of fork of Ely Springs-Stampede Pass Road and road to Coyote Springs (?), 20 feet west of road to Stampede Pass; iron post stamped " 4755191527 "
$4,754.478$
Dry Lake Valley, east edge of, 3.8 miles southwest of forks of PiocheCoyote Springs road and Ely Springs road, 8 feet west of road to Ely Springs; top of boulder, marked "U. S. B. M. 4926 " $\qquad$ 4, 925.64
Stampede Pass, 6.8 miles southwest of, 2.5 miles southwest of forks of Pioche-Coyote Springs road and Ely Springs road, 70 feet south of road; top of boulder, marked "U. S. B. M. 5092 " $\qquad$ 5, 091. 61
Stampede Pass, 6.8 miles southwest of, 2.5 miles southwest of forks of Pioche-Coyote Springs road and Ely Springs road, 8 feet south of road to Ely Springs, on top of slope on north side of deep wash, on basalt boulder; bronze tablet, stamped " 5177191528 " $\qquad$ 5, 176. 638
Stampede Pass, 5.7 miles southwest of, 1.4 miles southwest of forks of Pioche-Coyote Springs road and Ely Springs road, 60 feet south of Ely rings road, in small draw; top of boulder, marked "U, S. B. M. $5350 "$

Stampede Pass, 4.8 miles southwest of, 0.5 mile southwest of forks of Pioche-Coyote Springs and Ely Springs roads, 200 feet east of Ely Springs road; top of basalt boulder, marked "U. S. B. M. ऽ537" 5, 287.15
Stampede Pass, 4.3 miles southwest of, 15 feet east of forks of Pioche-Coyote Springs and Ely Springs roads, about 2.5 miles east of foot of slope on east side of Dry Lake Valley, 8 feet north of main road; iron post, stamped " 5585191529 " $\qquad$ $5,585.336$
Stampede Pass, 3.7 miles west of, 0.7 mile east of forks of PiocheCoyote Springs and Ely Springs roads, 1 foot south of road; top of boulder, marked "U. S. B. M. 5778 " $5,778.13$
Stampede Pass, 3.1 miles west of, 6 feet south of road; top of boulder, marked " U. S. B. M. 5987 "

5, 986. 72
Stampede Pass, 2.5 miles west of, 1.8 miles east of fork of Coyote Springs and Ely Springs roads, 5 feet north of road, in juniper tree; railroad spike, scribed " U. S. B. M. 6199 "
$6,199.02$
Stampede Pass, 2 miles west of, 6 feet north of road, in 8 -inch cedar tree; railroad spike, scribed " U. S. B. M. 6397 "

6, 396.56

Stampede Pass, 225 feet west of and 6 feet below level of summit of, 20 feet north of and 7 feet above wagon road, witnessed by pile of boulders, in limestone outcrop; bronze tablet, stamped " 7315 Feet. 191529 " (restamped 30)

7, 315. 432

Stampede Pass, 2.4 miles southeast of, 2.6 miles west of the "Point mine," 800 feet northeast of prospector C. H. Smith's cabin, in fork of main road with old road leading across wash and up to the pass, south side of main wash; iron post stamped " 6551191531 "

6,550. 666
From point 6.1 miles south of Bristol Well south along highway to point 4.3 miles southwest of Stampede Pass.

Bristol Well, 7. 1 miles south of, 2 miles south of road forks, 15 feet vest of roa top of rock about 2 feet high, painted " $5,488.226$ " $-5,487.88$

From point near Pioche to point 4.8 miles northwest of Pioche.
Pioche, 4.8 miles northwest of, 2.4 miles north of railroad crossing, east margin of road, in limestone ledge; hole 1 inch square $\frac{1}{4}$ inch deep, painted " 5,844 "
$5,844.23$

## IVANPAH QUADRANGLE.

$$
\text { [Latitude } 35^{\circ}-36^{\circ} \text {; longitude } 115^{\circ}-116^{\circ} . \text { ] }
$$

From Jean along highways west and northwest to Good Springs, thence north
to a bench mark 4.2 miles east of Mountain Spring, set in 1907. (Primary
leveling by L. F. Biggs in 1915.)
Jean-Clark county line (see U. S. C. \& G. S. Special Pub. 18, p. 204) - 2, 866.336
Jean, 1.3 miles west of, 40 feet south of road at junction of secondclass road south; chiseled point on rock, painted " 2,881 U. S. B. M."
$2,880.66$
Jean, 2.2 miles west of, 20 feet north of road; chiseled point on rock, painted " 2,920 U. S. B. M."
$2,920.45$
Jean, 3.3 miles west of, 30 feet south of road; chiseled point on rock, painted "U. S. B. M. 2,974"

2, 974.39
Jean, 4.5 miles west of, 6.5 miles southeast of Good Springs, 40 feet north of crossroads; iron post stamped " 301411915 ".....- 3, 013.903
Good Springs, 4.4 miles southeast of, 10 feet north of road; chiseled point on rock, painted "U. S. 3117 b. m. "
$3,117.01$
Good Springs, 3.5 miles southeast of, 10 feet north of road, at $Y$ road southwest ; top of rock, painted "U. S. 3249 B. M."
$3,248.64$
Good Springs, 2.1 miles southeast of, at top of grade where road leaves canyon, 10 feet east of road, in flat rock ledge; bronze tablet stamped " 347221915 "

3, 472. 327
Good Springs, 1.4 miles southeast of, 100 feet southeast of crossroads; chiseled point on rock, painted "U. S. 3557 B. M."

3, 557. 01
Good Springs, 350 feet southeast of Yount \& Fayles store, 50 feet south of road, in sandstone rock (probably quarter section corner) ; aluminum tablet stamped " 369531915 "
$3,694.755$
Good Springs, at schoolhouse, in foundation, 1 foot above ground and 1 foot south of northeast corner; bronze tablet stamped " 3718 41915 "
$3,717$. S07
Good Springs, 1.1 miles north of, west edge of road; chiseled point on rock, painted " U. S. 3759 B. M."

3, 759.06

## Good Springs, 2.4 miles north of, at fork of road to Double Up mine; Feet. chiseled point on rock, painted " U. S. 3928 B. M." 3, 927.55

Good Springs, 3.6 miles north of, 20 feet west of road; chiseled point
on rock, chiseled "U. S. 4034 B. M."-------- 034.11
Good Springs, 5.3 miles north of, at junction of road to 99 mine; iron post stamped " 426081915 "
$4,259.810$
Good Springs, 6.5 miles north of, 20 feet west of road; chiseled point on rock, chiseled " U. S. 4418 B. M."
$4,417.49$
Good Springs, 7.2 miles north of edge of road; chiseled point on ledge, painted "U. S. 4522 B. M."
$4,522.13$
Good Springs, 8.1 miles north of, 30 feet east of road, at rocky point; chiseled point on rock, painted " C. S. 4649 B. M."
$4,648.57$
Good Springs, 9.2 miles north of, 0.6 mile south of Cottonwood Summit 30 feet east of road, in ledge; chiseled point, painted "U. S. 4790 N. M."
4. 789.67

Cottonwood Pass, 9.8 miles north of Good Springs, 30 feet east of road at summit of pass, in ledge; bronze tablet stamped " 4920 161915 "
$4,920.158$
Cottonwood Pass, 1.3 miles north of, east edge of road, on slate ledge ; chiseled point, painted " U. S. 4555 B. M."
$4,555.07$
From point 4.2 miles east of Mountain Spring along highways southwest to Potosi, thence south 8.9 miles, thence east via Wilson Pass to Good Springs. (See Las Vegas quadrangle for part of this line.)

Potosi Mine, 5.3 miles northeast of, in sinall saddle, on north edge of road; point on rock, painted " U. S. 4925 B. M."
4. 924.70

Potosi Mine, 3.5 miles northeast of, on north edge of road, on ledge; chiseled point, painted "U. S. 5384 B. M."
$5,383.75$
Potosi Mine, 1.8 miles northeast of, 80 feet south of road in saddle, in ledge; bronze tablet stamped " 6239201915 "

6, 239. 163
Potosi Mine, 150 feet east of Cook House, in rock ledge; bronze tablet stamped " 5699211915 ".
$5,698.843$
Potosi Mine, 1 mile south of, 50 feet northwest of $Y$ road to Ripley; chiseled point on rock, painted "U. S, 5373 B. M."
$5,372.52$
Potosi Mine, 2 miles south of, west edge of road, 1,000 feet north of wash ; chiseled point on rock, painted "U. S. 5087 B. M." 5, 086, 35
Potosi Mine, 3.5 miles south of, west edge of road, near north base of small butte, on rock ; chiseled point, painted "U. S. 4859 B. M."- 4, 858. 53
Potosi Mine, 4.8 miles south of, about 0.3 mile west of negro camp, west edge of road, 150 feet south of saddle, in rock ledge; bronze tablet flush with ground stamped " 4707221915 " 4, 706.588
Wilson Pass, 4.3 miles northwest of, in sacidle at east base of butte, east edge of old trail, on rock; chiseled point, marked "U. S. 4385 B. M." $4,385.21$
Wilson Pass, 3 miles northwest of, in saddle, at east edge of road, on rock; chiseled point, painted "U. S. 4401 B. M."

4, 401. 34
Wilson Pass, 1.8 miles west of, 500 feet southwest of second-class road northwest, north edge of road; chiseled point on rock, marked "U. S. 4313 B. M."
$4,312.99$
Wilson Pass, 0.9 mile west of, north edge of road, on rock ledge ; chiseled point, painted "U. S. 4590 B. M." 4, 589: 56
Wilson Pass, north edge of road, in rock ledge; aluminum tablet stamped "5023 71915 "

Wilson Pass, 0.6 mile southeast of, north edge of road where road Feet. leaves canyon; chiseled point on rock, marked "U. S. 4761 B. M."- 4, 761.24
Good Springs, 4.5 miles northwest of, at Red Cloud mine, 10 feet north of road, on rock; chiseled point marked " U. S. 4534 B. M."- 4, 534. 33
Good Springs. 4.1 miles northwest of, at $Y$ road. on rock; chiseled point, marked " U. S. 4447 B. M."
$4,447.33$
Good Springs, 3 miles northwest of, 60 feet southeast of junction of Yellow Pine mine and Wilson Pass roads, in conglomerate ledge; aluminum tablet stamped " 419761915 "
Good Springs, 2.3 miles northwest of, 60 feet east of road forks, on rock; chiseled point, painted "U. S. 4036 B. M."

4, 03 ป. 51
Good Springs, 1.7 miles northwest of, 100 feet south of railroad crossing, on rock ; chiseled point, painted "U. S. 3937 B. M."----
Good Springs, 1 mile northwest of, 300 feet east of railroad crossing, 20 feet east of road, on rock; chiseled point, painted "U. S. 3825 B. M."

3, 824.65
From Good Springs along highways southwest via Columbia Pass to point 2 miles west of McVicar mine, thence north to point 1.8 miles west of Wilson Pass.

Good Springs, 1.3 miles west of, at fork of road to Jean, on rock; chiseled point, painted " U. S. 3754 B. M."
Good Springs, 2.3 miles west of, south edge of road, on ledge; chiseled point, marked " U. S. 3985 B. M."
Good Springs, 3 miles west of, south edge of road, on ledge; chiseled point, marked "U. S. 4176 B. M."
$4,176.27$
Columbia Pass, 0.4 miles east of, north edge of road, opposite Columbia mine ore chute, in ledge; aluminum tablet, marked " 42735 1915 "

4,272. 769
Columbia Pass, 20 feet south of road, on rock; chiseled point, marked "U. S. 4434 B. M."
$4,434.13$
Columbia Pass, 1 mile west of, south edge of road, on white rock; chiseled point, painted " U. S. 4221 B. M."
$4,220.58$
Columbia Pass, 2 miles west of, 300 feet west of road to Kerby mine, 50 feet west of road, on rock ledge; chiseled point marked "U. S. 3909 B. M."

3, 909.12
Columbia Pass, 2.5 miles west of, 900 feet north of $Y$ road to Sultan mine, west edge of road, opposite Bill Nye mine; bronze tablet in rock ledge, stamped " 3708101915 "

3, 707. 600
Junction of Ripley and Sultan mine roads, 0.8 mile south of, at second-class road to Hoosier mine, on rock; chiseled point, marked "U. S. 3432 B. M."
$3,431.50$
Tiffin mine No. 2, 0.5 mile north of, at junction of road to Sultan mine, on rock; chiseled point, painted " U. S. 3292 B. M."

3,291. 95
Tiffin mine, 100 feet west of tents, on large boukler; bronze tablet stamped " 328410 A 1915 "

3, 283.818
McVicar mine, 300 feet southeast of tents, on rock; chiseled point, painted "U. S. 3006 B. M." $\qquad$
McVicar mine, 0.8 mile west of, at foot of hill, 80 feet north of wash, on rock ledge ; chiseled point, marked "U. S. 2828 B. M."

2, 828.23
Ripley, 3.5 miles southeast of, at forks of $Y$ road northwest, 20 feet east of road; iron post stamped " 2616111915 "
$2,615.572$

Ripley, 2.2 miles southeast of, at $\mathbf{Y}$ fork at second-class road north- Feet. west, on rock; chiseled point, marked "U. S. 2616 B. M." 2. 615.92

Ripley, 1 mile southeast of, at $Y$ fork at second-class road north;
chiseled point on rock, marked " U. S. 2653 B. M."------------ $2,653.04$

Boss mine, 100 feet north of cook house; bronze tablet in ledge stamped " 3156131915 "

3, 156.189
Boss mine, 0.6 mile north of, east edge of road, in saddle, on rock; chiseled point, painted " U. S. 3395 B. M."

3, 394. 60
Road fork to Betty Brown mine, 40 feet east of road, on rock; chiseled point, marked "U. S. 3513 B. M."

3, 512. 60
Boss mine, 2 miles northeast of, at east edge of Butte, north side of wash, on ledge; chiseled point, painted "U. S. 3678 B. M."---3, 677.85
Boss mine, 2.6 miles northeast of, 200 feet north of road fork to Keystone mine, 10 feet east of road, at base of hill; bronze tablet stamped " 3842141915 "
$3,842.357$

From point 4.5 miles west of Jean, southwest along highways to point 2 miles east of New Year mine (double spur line).

Jean, 4.5 miles west of, 5.5 miles southeast of Good Springs, 40 feet north of crossroads; iron post stamped " 301411915 "

3, 013. 903

Bullion mine, 1 mile east of, 30 feet south of road, 100 feet east of road forks, on rock; chiseled point, painted "U. S. 3327 B. M."--
Bullion mine, about 1 mile southeast of, 20 feet west of old road, on rock cliff; bronze tablet strmped " 3348171915 "

3, 326. 48
 Borax, east edge of road, on ledge; chiseled point, marked "U. S. 3358 B. M." 3, 358.11
New Year mine, about 2 miles east of, 0.8 mile west of Borax and Bullion mine road forks, north side of road, in rock cliff; bronze tablet stamped " 3500181915 "

3, 499.895
From point 5 miles west of Searchlight west along Atchison, Topeka \& Santa Fe Ry. to State line. (Primary leveling in 1909 by L. F. Biggs.)
Searchlight, 5.6 miles west of, in base of milepost 17 ; spike with aluminum tag stamped " 3612 "

3, 610.30
Searchlight, 6.6 miles west of, in base of milepost 16 ; spike with aluminum tag stamped " 3735 " 3, 733. 81
Searchlight, 7.6 miles west of, 5 feet west of milepost 15 , north edge of railroad right of way; iron post stamped " 3860 B 190916 "--.-
Searchlight, 8.6 miles west of, in base of milepost 14 ; spike with aluminum tag stamped " 3965 "

3, 963.52
Searchlight, 9.6 miles west of, in base of fourth telephone pole west of milepost 13 ; spike with aluminum tag stamped " 4058 "
$4,056.09$
Searchlight, 10.6 miles west of, in base of milepost 12 ; spike with aluminum tag stamped " 4146 ".
$4,144.61$
Searchlight, 11 miles west of, north edge of railroad right of way. 50 feet east of Nevada-California State line post, in bedrock; aluminum tablet stamped " 4199 B 190917 "

## From Stump Springs south to Culver ranch, near State line. ${ }^{1}$

Stump Springs, 4.7 miles southwest of, 100 feet north of junction of Stump Springs and Sandy roads; iron post stamped " 2708 B

Feet. 190954 " 2. 706.380

Stump Springs, 7.2 miles southeast of, 20 feet west of road, at northwest point of clay-colored butte; iron post stamped " 2848 B 190953 "

2, 846. 283
Culver ranch, 500 feet north of house, 15 feet west of road; iron post stamped " 2684 B 190952 "

2, 682. 739
JEAN QUADRANGLE.
[Latitude $35^{\circ} 30^{\prime}-36^{\circ}$; longitude $115^{\circ}-115^{\circ} \quad 30^{\prime}$.]
From Roach north along San Pedro, Los Angeles \& Salt Lake R. R. to Bard. (Precise leveling by U. S. Coast and Geodetic Survey.)
Roach, $12 \frac{1}{2}$ poles south of milepole 292, $1 \frac{1}{2}$ poles north of railroad section foreman's house, 18 meters west of San Pedro, Los Angeles \& Salt Lake R. R. track ; 1.5 meters below base of rail, in top of stone post ; bottom of square hole (C. \& G. S. b. m. A)

2, 612. 636
Borax, 21 meters east of twelfth pole south of milepole 297, 4.5 meters east of railroad track, on horizontal surface of northwest corner of most northwesterly of the 3 southerly concrete foundation piers to steel water tank of railroad, 0.5 meter above base of rail, bottom of square hole (C. \& G. S. b. m. B) $\qquad$ 2, 703. 364
Jean, 13.5 meters north of third pole north of milepole 301,41 meters southwest of southwest corner of depot, 17 meters west of main railroad track, 20 meters east and in front of post office and store of Yount \& Fayle, in compact gravel, 0.5 meter below the base of rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. C) - 2, 866. 336
Jean, 2.3 miles north of, 13 poles north of milepole 303,32 meters west of track, in gravel 1.5 meters below base of rail, on iron pipe; chiseled cross marked " U. S." (C. \& G. S. b. m. D)

2,963. 233
Sutor, 10.5 poles southwest of milepost 306,16 meters southeast of track, 31 meters south of signboard, 1.5 meters below base of rail, i on iron pipe; chiseled cross marked "U. S." (C. \& G. S. b. m. E) _-_ 3, 033. 531
Erie, 1.2 miles southwest of, 1.5 poles north of milepole 308, 17.5 meters east of track, on level with base of rail, on top of iron pipe; chiseled cross marked "U. S." (C. \& G. S. b. m. F)
Erie, opposite seventh pole northeast of milepole 309, 47 meters west of west corner of ailroad depot, 16 meters northwest of track, 0.5 meter above base oi rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. G)

3,122. 143
Sloan, 0.7 mile southwest of, 11.66 poles north of milepole 314 , east concrete abutment to bridge 314, in top horizontal surface of east end, 2.66 meters east of track, 0.25 meter below base of rail; chiseled square (C. \& G. S. b. m. H)

2,859. 450
Sloan, 1.5 poles east of milepole 315,14 meters southwest of signboard, 19 meters southwest of track, 0.5 meter below base of rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. I) 2, 828. 787
Sloan, 2.2 miles north of, 4 meters northeast of sixth pole northwest . of milepole 317,15 meters northeast of track. 2 neters below base of rail, on top of iron pipe; chiseled cross marked "U. S." (C. \& G. S. b. m. J)
$2,717.534$

[^4]Bard, 4.5 meters north of ninth pole northwest of milepole 320, 11 meters east of signboard, 15 meters northeast of track. 1 meter below base of rail, in top of stone post; bottom of square hole (C. \& Feet. G. S. b. m. K)

2, 574. 792

## KAWICH QUADRANGLE.

$$
\text { [Latitude } 37^{\circ}-38^{\circ} \text {; longitude } 116^{\circ}-117^{\circ} \text {.] }
$$

From Bonnie Claire southeast along Bullfrog Goldfield R. R. to Pioneer. (Precise leveling by U. S. Coast and Geodetic Survey.)

Bonnie Claire, 8.5 miles south of, 30 meters north of milepole 493 , 15 meters west of railroad track, in stone post ; red-metal disk (C. \& G. S. b. m. $\mathrm{C}_{16}$ ) 3, 960. 550
Bonnie Claire, 11.5 miles south of, 2 telegraph poles and 20 meters south of milepole 128, 15 meters west of track, in stone post; redmetal disk (C. \& G. S. b. m. D 16 ) 3, 973.932
Bonnie Claire, 15.5 miles south of, 3 meters north of milepole 131, 15 meters west of railroad, in top of stone post; red-metal disk (C. \& G. S. b. m. E 16 )

3, 999. 205
Ancram, opposite end of switch, 3 meters north of milepole 134, 15 meters west of main track of railroad, in top of stone post; redmetal disk (C. \& G. S. b. m. F $\mathrm{F}_{18}$ )

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4,022.082
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Ancram, 3 miles south of, 3 meters north of milepole 137, 15 meters west of track, in line with telegraph poles, in top of stone post; red-metal disk (C. \& G. S. b. m. G $\mathrm{G}_{10}$ )

4, 026.931
Pioneer, 3 miles north of, 2 telegraph poles and 5 meters south of milepole 140,15 meters west of track, on small hill made by railroad cutting through a small ridge, 200 meters north of road crossing, in top of stone post ; red-metal disk (C. \& G. S. b. m. H $\mathrm{H}_{18}$ )
Pioneer, near north end of side track, 250 meters north of station, 35 meters west of main track of railroad, abreast of milepole 143, on iron post ; red-metal disk (C. \& G. S. b, m. $\mathrm{I}_{16}$ )

From point near Seattle Well to point 2.2 miles north of Mud Springs. (Pri-
mary leveling by Ress Philips in 1905.)
$3,985.104$

Seattle Well, 5 miles south of, 30 feet south of large yucca stump, 10 feet east of road; iron post stamped " 23 " $\qquad$ 4, 337. 394
Mud Springs, 5 miles north of, at fork of Bullfrog road on south side
of small ravine; iron post stamped " 24 "

## KUMIVA QUADRANGLE.

[Latitude $40^{\circ}-40^{\circ} 30^{\prime}$; longitude $119^{\circ}-119^{\circ} 30^{\prime}$.]
Elevations by water leveling along shore of Winnemucca Lake by General Land Office in 1912.
T. 25 N., R. 23 E., N. $\frac{1}{2}$ SE. $\frac{1}{3}$ sec. 3, 20 chains east and 30 chains north of quarter corner of secs. 3 and 10, 600 feet west of lake shore, 8 feet west of center of Wadsworth-Gerlac road; standard b. m. post
$3,878,551$
I. 26 N., R. 23 E., NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 10 , S. $35^{\circ} 40^{\prime}$ W. 18.63 chains from meander corner of secs. 10 and 11,5 feet west of center of Wadsworth-Gerlac road, 200 feet south of spring, 250 feet south of fork in road, 200 feet west of lake shore, opposite small bay, 1,000 feet north of corral on road; standard b. m. post marked " 3876 ".-

3, 867.778
T. 27 N., R. 23 E., SW. $\frac{1}{4} \sec .14$, N. $36^{\circ} 35^{\prime}$ E. 24.67 chains from closing corner on Reservation boundary of line between secs. 15 and 22, 7 feet west of center of Wadsworth-Gerlac road, 210 feet west of lake shore, 600 feet N. $70^{\circ} \mathrm{W}$. of chimney-shaped rock on lake shore; standard b. m. post marked " 3886 "-

Feet.

Winnemucca Lake, at middle latitude point, surface of water, July 11, 1911
$3,852.5$
Winnemucca Lake, at middle latitude point, surface of water, May 14 to June 10, 1912
$3,852.5$
Winnemucca Lake, at middle latitude point, surface of water, June 26, 1912
Winnemucca Lake, at middle latitude point, surface of water, June 1, 1912
$3,852.3$
Note.-The orthometric elevation of this lake is about 0.07 foot lower at north end and 0.07 foot higher at south end than the height at middle latitude point.

LAS VEGAS QUADRANGLE.
[Latitude $36^{\circ}-37^{\circ}$; longitude $115^{\circ}-116^{\circ}$.]
From Arden northeast along San Pedro, Los Angeles \& Salt Lake R. R. to Dike. (Precise leveling by U. S. Coast and Geodetic Survey.)

Arden, 2 miles south of, $12 \frac{1}{4}$ poles south of milepole 323,17 meters east of track, 1.5 meters below base of rail, on top of iron pipe; chiseled cross marked "U. S." (C. \& G. S. b. m. L)
$2,489.132$
Arden, 0.2 mile north of, 5.5 poles south of milepole 325,17 meters east of track, 1.5 meters below base of rail, on top of iron pipe; red-metal disk (C. \& G. S. b. m. M)
$2,401.593$
Arden, 1.5 miles north of, 1 meter east of second pole north of milepole $326,12.5$ meters east of track, 1.5 meters below base of rail ; iron post stamped "B 1907, 119, 2336," aluminum disk marked "U. S. G. S. B. M." (C. \& G. S. b. m. 2336 B) 2,334. 624
Bracken, $2 \overline{5} .5$ meters northwest of signboard, 19 meters east of track, 1 meter below base of rail, on top of iron post; red-metal disk (C. \& G. S. b. m. N)
$2,167,519$
Bracken, 0.7 mile north of, 3 meters east of milepole 330, $14 \frac{1}{4}$ meters east of track, 2 meters below base of rail; iron post stamped "B 1907, 118, 2136 " (C. \& G. S. b. m. 2136 B)

2, 134. 392
Las Vegas, at southeast corner of Main and Garcia streets, 6 blocks south and 1 block east of depot, half a block southeast of plant of Las Vegas Ice \& Manufacturing Co., 7 meters south of curb on Garcia Street, 9.5 meters east of curb on Main Street, in top of stone post; bottom of square hole (C. \& G. S. b. m. O)
$2,028,727$
Las Vegas, near northwest corner of First and Fremont streets, in sidewalk at southeast corner of First State Bank Building, 1 decimeter north of foot of column; aluminum tablet stamped "B 1907, 117, 2024," marked " U. S. G. S. B. M." (C. \& G. S. b. m. 2024 B) _- 2, 022.447
Las Vegas, 2 blocks north and 2 blocks east of depot, at northeast corner of Stewart and First streets, 4 meters east of curb on First Street, 4 meters north of curb on Stewart Street, half a block north of Arizona Club, on top of iron post; red-metal disk (C. \& G. S. b. m. P)
$2,018.880$
las Vegas, 46 meters west of entrance to ladies' waiting room of depot, 31 meters west of main track, 0.5 meter above base of rail; iron
post stamped "B 19071162033 U. S. G. S. B. M." (C. \& G. S. b. m. 2033 B ) $\qquad$ -

Feet.
2, 031.393
Stewart, 225 meters northeast of signboard "Stewart," 17 paces southeast of east rail of main track, 4 telegraph poles southwest of milepole 339,21 paces southwest of section house, in fence corner outside of right of way, 2.5 feet from north fence and 3 feet from east fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. Q)

1,906. 089
Valley, 0.6 mile southwest of, 5 telegraph poles southwest of milepole 341, 19.7 feet southeast of east rail of main track, 2.8 feet from line of north bulkhead (produced) of bridge 341B, on large porphyry block in riprap work on southeast side of bridge, at northeast end of bridge opening; bottom of square hole marked " U . S. B. M." (C. \& G. S. b. m. R)

1,973. 901
Valley, 125 feet northwest of west rail of main track, directly opposite signboard "Valley," in top of stone post; bottom of square hole (C. \& G. S. b. m. S)

2,008. 795
Valley, 2.5 miles northeast of, 110 meters northeast of center of bridge $344 \mathrm{C}, 20.8$ meters northwest of center line of main track, 6.6 meters northwest of milepole 345 , on top of iron post; redmetal disk (C. \& G. S. b. m. T)
$2,135.042$
Dike, 300 meters east of signboard "Dike," 5 telegraph poles east of milepole 347, 218 meters south of center line of main track, 44 paces west of west face of section house and in line with the back wall produced, in top of stone post; bottom of square hole (C. \& G. S. b. m. U)
$2,249.540$
Dike, 3 miles northeast of, 40 meters southwest of milepole 350,250 meters southwest of bridge $350 \mathrm{~A}, 11.7$ meters northwest of west rail of main track and 5.8 meters above it, 1.5 meters southeast of line between milepole 350 and first telegraph pole south of it, set vertically in rock outerop; copper bolt in cement (C. \& G. S. b. m. V)

2, 413. 168
From point 14.4 miles east of Amargosa southeast along Las Vegas \& Tonopah R. R. to Las Vegas. (Precise leveling by U.S. Coast and Geodetic Survey.)

Amargosa, 14.4 miles east of, 10 feet north of milepole 60 ; iron post stamped " '3628 U. S. G. S." (C. \& G. S. b. m. K ${ }_{17}$ )

3, 627. 171
Amargosa, 16.2 miles east of, 5 meters west of milepole 53, 15 meters north of track, in top of stone post; red-metal disk (C. \& G. S. b. $m . L_{17}$ )
$3,613.982$
Amargosa, 18.4 miles east of, 12 miles west of Indian Springs, 10 feet north of milepole 56 ; iron post stamped " 3576 U. S. G. S." (C. \& G. S. b. m. M $\mathrm{M}_{17}$ )

3,574. 953
Indian Springs, 8 miles west of, 10 feet north of milepole 52 ; iron post stamped " 3431 U. S. G. S." (C. \& G. S. b. m. N N ${ }_{17}$ _

3, 429.918
Indian Springs, 6 miles west of, 1 meter east of milepole 50, 15 meters north of track (C. \& G. S. b. m. O ${ }_{17}$ ) $3,333.222$
Indian Springs, 4 miles west of, 10 feet north of milepole 48 ; iron post stamped " 3279 U. S. G. S." (C. \& G. S. b. m. P P 17 )

3, 278.314
Indian Springs, 0.2 mile west of, 10 feet north of milepole 44 ; iron post stamped " 3135 U. S. G. S." (C. \& G. S. b. m. Q17) $3,134.498$
Indian Springs, 3.5 miles east of, 10 feet north of milepole 40 ; iron Feet.post stamped " 3148 U. S. G. S." (C. \& G. S. b. m. R R 1 )3, 146. 372
Indian Springs, 5.5 miles east of, 3 meters west of milepole 38 , intop of stone post; red-metal disk (C. \& G. S. b. m. S $\mathrm{S}_{17}$ )3, 099. 567
Indian Springs, 7.5 miles east of, 10 feet north of milepole 36 ; ironpost stamped" 3084 U. S. G. S." (C. \& G. S. b. m. T ${ }_{17}$ )3, 073.386Indian Springs, 11.5 miles east of, 10 feet north of milepole 32 ; ironpost stamped " 3062 U. S. G. S." (C. \& G. S. b. m. U ${ }_{17}$ )Indian Springs, 15.5 miles east of, 10 feet north of milepole 28 ; ironpost stamped " 3029 U. S. G. S." (C. \& G. S. b. m. V 17 )3, 028.314
Indian Springs, 17.5 miles east of, 2 meters west of milepole 36,in top of stone post; red-metal disk (C. \& G. S. b. m. W $\mathrm{W}_{17}$ ) $\ldots \ldots-\ldots$ 2, 925.040
Corn Creek, 0.6 mile west of, 10 feet north of milepole 24 ; iron poststamped " 2876 U. S. G. S." (C. \& G. S. b. m. X ${ }_{17}$ )2,875. 227
Corn Creek, 3,4 miles east of, 10 feet north of milepole 20 ; iron post stamped " 2779 U. S. G. S." (C. \& G. S. b. m. Y 17 ) ..... 2, 778.577
Corn Creek, 7.4 miles east of, 10 feet north of milepole 16 ; ironpost stamped " 2645 U. S. G. S." (C. \& G. S. b. m. $Z_{17}$ )Corn Creek, 9.4 miles east of, 2 meters west of milepole 14 ; in top ofstone post ; red-metal disk (C. \& G. S. b. m. A A )$2,543.745$
Las Vegas, 12 miles north of, 10 feet north of milepole 12 ; iron post stamped " 2454 U. S. G. S." (C. \& G. S. b. m. B 1 s) ..... $2,452.774$
Las Vegas, 8 miles north of, 40 feet south of milepole 8 ; iron post stamped " 2294 U. S. G. S." (C. \& G. S. b. m. C 1 ) ..... 2, 292. 892
Las Vegas, 6 miles north of, 2 telegraph poles north of milepole 6 , 36 meters east of track ; on top of stone post ; red-metal disk (C. \& G. S. b. m. $\mathrm{D}_{1 \mathrm{~s}}$ ) ..... 2, 233. 992
Las Vegas, 4 miles north of, 10 feet north of milepole 4 ; iron post stamped " 2139 U. S. G. S." (C. \& G. S. b. m. Ens) ..... 2, 137. 630Las Vegas, in the south end of lower step to Clark County court-house ; red-metal disk (C. \& G. S. b. m. F ${ }_{18}$ )2,020. 954
From Las Vegas southwest along San Pedro, Los Angeles \& Salt Lake R. R. 20.4 miles, thence west along road to Stump Springs and northwest toPahrump, (Primary leveling by L. F. Biggs in 1907.)
Las Vegas, 4.4 miles southwest of, 10 feet south of milepost 330 ; iron post stamped " 2136 B 1907 " $2,334.624$
Las Vegas, 8.4 miles southwest of. 400 feet northeast of milepost 326 ;
1 iron post stamped " 2336 B 1907 " ..... 2,334. 624
Arden, in front of station; top of rail ..... 2,417. 2
Las Vegas, 12.3 miles southwest of, 20 feet south of road; iron post stamped " 2631 B 1907 " ..... 2,629.919
Las Vegas, 16.9 miles southwest of, 20 feet north of road; iron post stamped " 3036 B 1907 " ..... 3, 034. 728
Las Vegas, 20.4 miles southwest of. 10 feet south of road, in boulder; aluminum tablet stamped " 3493 B 1907" ..... $3,491.472$Mountain Spring, 4.2 miles east of, 20 feet south of road, in boulder;aluminum tablet stamped " 4555 B 1907 "$4,556.046$
Mountain Spring, 0.5 mile south of, 20 feet south of road; iron post. stamped " 5504 B 1907" ..... $5,502.263$
Mountain Spring, 4.3 miles west of, 10 feet north of road, in boulder; aluminum tablet stamped " 4556 B 1907 " ..... 4,554. 824
Mountain Spring, 8.1 miles west of, 10 feet north of road, in boulder;aluminum tablet stamped "3909 B 1907 "3, 908.234
Stump Springs, 5 miles east of, at junction of roads; iron post stamped Feet.
" 3162 B 1907"Stump Springs, 200 feet south of, at junction of roads; iron poststamped " 2809 B 1907 "2, 807.021
Stump Springs, 6.2 miles west of, 8 miles southeast of Manse, 20 feet north of road; iron post stamped " 2929 B 1907 ", ..... 2, 927. 785
Manse, 40 feet south of post office, in front of ranch house; iron post stamped " 2776 B 1907 " ..... 2, 774. 674
l'ahrump, 20 feet north of hotel; iron post stamped " 2668 B 1907" ..... 2, 666. 583

From Las Vegas south 15 miles along road to Searchlight. (Part of circuit to Barnwell, Cal.)
Las Vegas, 3.7 miles south of, 50 feet west of spring, in base of mesquite tree; nail with aluminum tag stamped " 1793 "
Las Vegas, 7.2 miles south of, 25 feet west of road, in base of mesquite; spike with aluminum tag stamped " 1677 " 1, 675.52
Mesquite Spring, 25 feet east of pump, in base of mesquite; spike with aluminum tag stamped " 1621 "

1, 619.65
Mesquite Spring, 25 feet north of pump, in base of mesquite; spike with aluminum tag stamped " 1621 " $1,619.63$
Mesquite Spring, 25 feet north of pump, in lava rock buried flush with ground ; aluminum tablet stamped " 1621 B 1909 1" 1,619. 564
Mesquite Spring, 3.9 miles south of, 20 feet east of road, 300 feet north of road junction to Camp Fred Ellen, in boulder, marked by rock cairn ; aluminum tablet stamped " 1746 B 19092 "

1, 743. 988
From point 4.2 miles east of Mountain Spring west along highway toward Potosi. (Primary leveling by L, F. Biggs in 1915.)

Mountain Spring, 4.2 miles east of, 20 feet south of road, in boulder; aluminum tablet stamped " 4557 B 1907 123." (Bull. 488, p. 10, value $4555.516+.530$ )
Potosi Mine, 4.7 miles northeast of, 60 feet east of fork of road to Mountain Spring, on rock ledge; chiseled point, painted "U. S. 5055 B. M."

5, 054. 53

## LIDA QUADRANGLE. ${ }^{1}$

## [Latitude $37^{\circ}-38^{\circ}$; longitude $117^{\circ}-118^{\circ}$.]

From McSweeney south along Tonopah and Goldfield R. R. to Goldfield. (Precise leveling by U. S. Coast and Geodetic Survey.)
McSweeney Junction, 5.5 miles south of, 5 meters south of milepole 63, 20 meters west of track ; on top of iron post: red-metal disk (C. \& S. b. m. $\mathrm{D}_{15}$ )

5, 027. 441
Klondyke, 0.5 mile north of, 3 meters south of milepole 67,20 meters west of track; on top of iron post ; red-metal disk; (C. \& G. S. b. m. $\mathrm{E}_{15}$ )
Klondyke, 3.5 miles southwest of, 3 meters south of milepole 71, 20 meters west of track, in line with telegraph poles, on top of iron post; red-metal disk (C. \& G. S. b. m. F ${ }_{15}$ )
Columbia, 4 miles north of, 300 meters east of track, opposite fifth telegraph pole north of milepole 76 ; iron post stamped " 5346 " (U. S. G. S.) (C. \& G. S. b. M. G G 18 ) $5,339.320$

Goldfield, 1 mile north of, in west end of concrete pier at end of spur of railroad tracks leading to an abandoned mill, in top of stone post ; bottom of square hole (C. \& G. S. b. m. H ${ }_{15}$ ) Goldfield, in west face of bank on corner of Columbia Street and First Street north of Crook Avenue ; red-metal disk, (C. \& G. S. b. m. I ${ }_{15}$ ) - 5, 675, 993
Goldfield, at southeast corner of Crook Avenue and alley between Main and Columbia streets, in 6 -foot stone post set 3 feet in ground; aluminum tablet stamped "B 19051 H" (C. \& G. S. b. m. J 15 )
$5,677.731$
Note.-The original disk has been broken off with the top of the post, The point used as the new bench mark was the bottom of the original drill hole and is probably about 4 inches below the original bench mark.
Goldfield, in west face of Goldfield Hotel ; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{K}_{15}$ )

5, 688.998
Goldfield, in south face of county courthouse built in 1907; bronze tablet stamped " U. S. G. S." (C. \& G. S. b. m. L Li5)
$5,700.835$
From Goldfield south along Las Vegas \& Tonopah R. R. to Bonnie Claire.
Columbia, 3.5 miles south along tracks of Las Vegas \& Tonopah R. R. from Tonopah and Goldfield R. R. crossing, 0.3 mile south of the station signboard of Red Rock, 100 meters south of switch stand near end of section 21 of railroad, 10 meters west of track; U. S. G. S. iron post, unmarked (C. \& G. S. b. m. M M

5, 803. 128
Columbia, 7 miles south of, 0.3 mile south of milepole 189 , near point of curvature of a curve south of a quarter-mile tangent, 30 meters west of and 3 meters lower than track, on top of iron post; redmetal disk (C. \& G. S. b. m. N ${ }_{15}$ )
$5,429.832$
Columbia, 11 miles south of, 3.5 telegraph poles north of milepole 185 and 15 meters west of track, in line with telegraph poles, on top of iron post ; red-metal disk (C. \& G. S. b. m. O ${ }_{16}$ )
Columbia, 14 miles south of, 8 meters south of milepole 182, 75 meters north of road crossing, 15 meters west of track, on top of iron post ; red-metal disk (C. \& G. S. b. m. P P 15 )

Ralston, in concrete foundation of northeast pillar of railroad well derrick; in top of stone post, bottom of square hole (C. \& G. S. b. m. Q15)
Ralston, 3 miles south of, 20 meters north of milepole 177, 15 meters west of track, in line with telegraph poles, on top of iron post ; redmetal disk (C. \& G. S. b. m. R R 15 )

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\(5,076.181\)
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Ralston, 6 miles south of, 3 meters north of ninth telegraph pole south of milepole 174,15 meters west of track, on top of iron post; redmetal disk (C. \& G. S. b. m. S ${ }_{15}$ )

4, 749. 082

Ralston, 9 miles south of, near first telegraph pole south of milepole 171, 20 meters west of track, on top of iron post; red-metal disk (C. \& G. S. b. m. T ${ }_{15}$ )

Wagner, 1 mile south of, 10 meters east of old Bull Frog Goldfield R. R. track, 350 meters east of milepole 168 on the Las Vegas \& Tonopah R. R. track, 200 meters east of large boulders on small knoll ; red-metal disk on top of iron post (C. \& G. S. b. m. U 15 ) --..-
Goldfield, 2 miles north of Tonopah Lumber Co.'s station, 8 feet east of summit, 170 meters west of Bullfrog Goldfield R. R. track, near milepole 108, opposite small wooden culvert under track, about 600 meters north of road crossing; iron post marked "U. S. G. S. 16-54." (C. \& G. S. b. m. V 15 )

Wagner, 7 miles south of, 100 meters south of milepole 110 (B. G R. R.), 500 meters east of milepole 162 on the Las Vegas \& Tonopah R. R. track, 10 meters west of the Bullfrog Goldfield track, near one of two large telegraph poles in that section of the line; on top of iron post; red-metal disk (C. \& G. S. b. m. W W ${ }_{15}$ )

Feet.
Bonnie Claire station, 3 miles north of (B. G. R. R.), 300 meters south of milepole 113,20 meters west of track, 0.5 mile east of milepole 159 of the Las Vegas \& Tonopah R. R., in stone post; red-metal disk (C. \& G. S. b. m. X ${ }_{15}$ )
4. 244.253

Bonnie Claire, 20 meters north of station, on northeast footing of ruined water tank of Bullfrog Goldfield R. R., on steel foot plate; center of an outlined square (C. \& G. S. b. m. Y ${ }_{15}$ ) $3,953.991$
Bonnie Claire, 150 meters south of old station building of Bullfrog Goldfield R. R., 95 meters west of track, 60 meters north of an east-west road, in stone post; red-metal disk (C. \& G. S. b. m. Z $\mathrm{Z}_{15}$ )
Bonnie Claire, near, 1.75 miles south of junction of Bullfrog Goldfield R. R. and Las Vegas \& Tonopah R. R., 5 meters north of milepole 119, 15 meters west of tracks, in stone post; red-metal disk (C. \& G. S. b. m. A $\mathrm{A}_{16}$ )
$3,954.930$
Bonnie Claire, 5.5 miles south of, 3 meters north of milepole 122, 15 meters west of Bullfrog Goldfield R. R. tracks, in stone post; red-metal disk (C. \& G. S. b. m. B ${ }_{10}$ ) 3, 961262
From State line east along road to Lida. (Precise leveling by R. A. Farmer in 1905.)
Forks of road to Oasis, 6 miles east of, 0.2 mile south of lone yucca tree, 30 feet north of road to Goldfield; iron post stamped "B F 1905125306 "
5.300 .117

Forks of road to Oasis, 7 miles east of, near west end of Palmetto Canyon, 60 feet south of road to Goldfield, on highest point of rock 2 by 3 by 4 feet; chiseled circle; rock painted "U. S. G. S. B. M. 33 " $5,406.82$
Palmetto, 6 miles west of, 100 feet north of Goldfield road, on highest point of 4 by 3 by 1 foot rock; hub, large boulder 10 feet north painted "U. S. G. S. B. M. 34 "
$5,530.89$
Palmetto, 3 miles west of, 5 feet north of Goldfield road, at foot of rocky cliff, in mass of scaly rock; tablet stamped "B F 1905 135884 "

5, 877. 809
Palmetto, opposite saloon; iron post stamped "B F 1905146168 "--- 6, 162. 197
Palmetto, 2 miles east of, 0.5 mile north of deserted mill, 40 feet south of Goldfield road, on highest point of rock 12 by 8 by 6 inches; hub
$6,339.40$
Indian Springs, 1.2 miles west of, 30 feet north of Goldfield road, 100 feet west of point where road curves around spur of hill; iron post stamped " B F 1905156624 "

6, 617. 911
Summit between Lida and Indian Springs, 10 feet north of Goldfield road; iron post stamped "B F 1905167409 "

7, 402. 673
Lida, 3 miles west of, 30 feet north of Goldfield road; iron post stamped "B F 1905176869 "

6, 863. 386
Lida, 1 mile west of, 50 feet north of Goldfield road, on highest point of rock 4 by 2 by 1 foot; hub, rock painted " U. S. B. M. 47 " and marked by rock monument
Lida, west end of Main Street, 30 feet east of well; iron post stamped "B F 1905186189 "
$6,182.965$

## LIDA $1^{\circ}$ QUADRANGLE (EAST HALF),

From Lida south via Stewart Mill to California-Nevada State line. (Primary leveling by Homer Hadley in 1905 and L. F. Biggs in 1907.)
Tule Spring, 300 feet south of saloon, at junction of roads, in large Feet.
boulder; tablet stamped " 5607 B 1907 B"
$5,602,447$
Sand Spring, 4 miles north of, 200 feet east of road, at State line monument 82 ; top of post_

3, 735. 714
From Lida east along road to fork east of county line, thence southeast to Seattle well.
Lida, 1 mile east of, 100 feet north of creek, west end of canyon, 30 feet north of road, at foot of bluff, in limestone; aluminum tablet stamped " 9 "
$6,030.545$
Eagle City, 300 feet north of well, 125 feet north of road, in limestone
ledge; aluminum tablet stamped " 8 "
Eagle City, 1.8 miles east of, 10 feet south of junction of BullfrogLida roads, in large boulder; aluminum tablet stamped " 7 " 5, 396. 805
Eagle City, 4.8 miles east of, 12 feet north of road, on south side of Mount Jackson, at point where road makes sharp turn to left toward opposite side of valley, on small ridge; iron post stamped " 10 " $5,026.245$
Eagle City, 6.8 miles east of, opposite mouth of canyon, east side
of Mount Jackson, at intersection of Gold Mountain trail with
road, 15 feet north of road; iron post stamped " 11 "
Eagle City, 10.8 miles east of, 20 feet east of road, 300 yards east of small knoll with large boulders on tap, above wagon road; iron post stamped " 12 " $4,769,880$
Eagle City, 13.8 miles southeast of, 20 feet east of small ravine, 10 feet north of road; iron post stamped " 134771 "

4, 767. 260
Eagle City, 16.8 miles southeast of, 10 feet north of road, 50 feet west of small deep ravine, 300 feet north of large yucca tree in bottom of ravine ; iron post stamped " 14 "

4, 734. 704
Eagle City, 19 miles southeast of, on summit of junction of Lida and Bullfrog road with Goldfield and Bullfrog stage road, 50 feet east of road, on ledge ; aluminum tablet stamped " 15 "
$4,689.730$
Goldfield \& Tonopah Lumber Co. station, 2 miles north of, 8 feet east
of summit ; iron post stamped " 16 "
Greens Well, 200 feet north of, at fork of road to Thorp's mill; iron post stamped " 17 "
$4,128.144$
Montana stage station, 2 miles north of, 15 feet west of road; iron
post stamped " 18 "
Summerville stage station, 150 feet north of well, at forks of road to Thorp's mill ; iron post stamped " 19 "

3,950. 434
Summerville, 3.2 miles south of, near south end of barren alkali flat; iron post stamped " 20 "

3,942. 134
Summerville, 6.2 miles south of, 40 feet east of road, on edge of low ridge running parallel with road; iron post stamped " 21 " 3, 947. 221
Seattle Well, 1.2 miles south of, 20 feet east of road; iron post
stamped " 22 "
From road junction east of Eagle City northeast to Goldfield.
Wilsons Well, 4.7 miles south of, 12 feet west of road, 0.5 mile northwest of foot of Jackson Mountain, where dim road leads to east; iron post stamped " 6 "
$5,192.636$

Wilsons Well, 1 mile south of, 25 feet east of road; iron post stamped " 5 " $\qquad$ Feet.

Halfway station, 3.2 miles south of, 210 feet east of road, on south edge of small wash, in boulder; aluminum tablet stamped " 4 " $5,211.627$ stamped " 3 "
Goldfield, 8.2 miles south of, 12 feet west of road, in edge of rock slide at foot of high bluff, 300 feet east of a rock ledge which is 100 feet in diameter and stands in valley, in boulder; aluminum tablet stamped " 2 "
Goldfield, 5 miles south of, 100 feet east of wagon road, 200 yards north of point where wagon road intersects automobile road, 30 feet west of wash, in boulder 3 by 3 by 2 feet; aluminum tablet stamped " 1 "
$5,518.798$
Goldfield, 1.8 miles southeast of, on first summit crossed by GoldfieldLida road, 50 feet south of road, 10 feet northwest of telegraph pole ; iron post stamped "B 19050 H "

6, 083. 091
Goldfield, at southeast corner of Crook Avenue and alley between Main and Columbia streets, in 6-foot stone post set 3 feet in ground; aluminum tablet stamped "B 19051 H"

5, 677. 731

## From Goldfield to Diamondfield and return.

Goldfield, 2.4 miles north of, along Tonopah road, 75 feet east of road, in boulder; aluminum tablet stamped " 5493 B 1905 H" $\qquad$ 5, 486. 232
Diamondfield, 2 feet east of northeast corner of post office; iron post
stamped "B 19053 H "
Diamondfield, No. 2 Daisy Bell mine, 160 feet south of southwest corner claim post, in highest surface of malpais rock; aluminum tablet stamped "B 19054 H"

6, 008. 863
Diamondfield, Loc Non Connaugh Lass mine, 200 feet west of claim post, on top of low ridge, in boulder; aluminum tablet stamped "1905 H 5 "
$5,809.380$
From point 1.8 miles south of Goldfield along south edge of malpais bluff, thence north to Goldfield ice factory and Goldfield.
Goldfield, 1.8 miles south of, on west side of first large draw west of Goldfield-Lida trail, near mass of malpais rock, in boulder, aluminum tablet stamped " 1905 H 6 " 6, 271. 311
Goldfield, 1.7 miles northwest of, 50 feet south of road to city dump; iron post stamped "H 71905 " 5, 749. 283
Goldfield, 1.2 miles northwest of, 1,000 feet north of station, opposite transit station 1455, 100 feet west of center line of railroad; paint point on cropping boulder, marked "U. S. B. M." (Railroad elevation $5,701.04$ feet)
$5,640.92$
From Goldfield north along Tonopah stage road to point near Gold Mountain Mining Co.'s plant.

Goldfield, 4.7 miles north of, 20 feet east of road, 400 feet east of telephone line ; iron post stamped " 15346 "
$5,339.320$
Goldfield, 8.7 miles north of, in forks of road, on north bank of deep ravine, 500 feet north of old well in bottom of ravine; iron post stamped " 25114 "
$5,107.283$
Ramseys Well, 150 feet southwest of, at southeast corner of restaurant; iron post stamped " 34995 "
$4,988,373$
$75642^{\circ}$-Bull. 654-17-4

Ramseys Well, 3.5 miles north of, 30 feet west of road, on north side Feet. of deep ravine; iron post stamped " 45187 " $5,180.134$
Ramseys Well, 5.5 miles north of, 0.2 mile south of forks of road to Klondike, 250 feet east of road, on west end of twin buttes; aluminum tablet stamped "5 5403 "
$5,395.413$
Gold Mountain Mining Co.'s plant, 1.3 miles south of, 30 feet south of road, in middle of valley, 1 mile south of summit; iron post stamped " 65754 "

5, 746. 738
LOVELOCKS QUADRANGLE (includes Rochester Special quadrangle).
[Latitude $40^{\circ}-40^{\circ} 30^{\prime}$; longitude $\left.118^{\circ}-118^{\circ} 30^{\prime}.\right]$
From Rye Patch southwest along Southern Pacific R. R. to Toy. (Preciso leveling by U. S. Coast and Geodetic Survey.)
Rye Patch, 1.7 miles east of, at railroad mileage 367.7, south of track, on top surface of east concrete abutment of small bridge under eastbound track; top of roundheaded iron bolt, Southern Pacific R. R. b. m. (C. \& G. S. b. m. $L_{7}$ ) (S. P.)
Rye Patch, 30 meters north of milepole 366, 49 meters north of track, 35 meters south of line fence, 20 meters east of freight house, in cement or stone post, red-metal disk; (C. \& G. S. b. m. M ${ }_{7}$ ) $4,251.468$
Rye Patch, at railroad mileage 365.4 , in top surface of south head wall of concrete culvert 365 C ; top of roundheaded iron bolt, Southern Pacific R. R. b. m. (C. \& G. S. b. m. $\mathrm{N}_{7}$ ) , (S. P.)
$4,246.022$
Zola, 2 miles east of, in top surface of south head wall of culvert 363 C ; top of a roundheaded iron bolt, Southern Pacific R. R. b. m. (C. \& G. S. b. m. O $\mathrm{O}_{7}$ ) 4, 264. 198
Zola, 0.3 mile east of, at railroad mileage $361.7,46$ meters south of Southern Pacific R. R. track, 1 meter north of south line fence, in cement or stone post ; red-metal disk (C. \& G. S. b. m. P $\mathrm{P}_{7}$ )
$4,231.803$
Oreana, at railroad mileage 357.9 , on top surface of southeastern one of four central pillars under railroad water tank; red-metal disk (C. \& G. S. b. m. QT)
$4,157.957$
Woolsey, at railroad mileage 353.6, 150 meters west of east end of siding, on top surface of south headwall of stone culvert 353 D , 10 meters south of track and 1 meter below it; red-metal disk (C. \& G. S. b. m. R ${ }_{7}$ )

Kodak, opposite station sign, on south side of track, 100 meters west of milepole 349 , 1 meter north of south line fence, in cement or stone post; red-metal disk (C. \& G. S. b. m. S ${ }_{7}$ )
$4,005.858$
Lovelocks, 2.5 miles east of, 0.5 meter north of milepole $347,16.5$ meters north of track, in cement or stone post; red-metal disk (C. \& G. S. b. m. T ${ }_{7}$ )

3, 993.240
Lovelocks, 2 miles east of, at railroad mileage 346.4 on south end of east abutment of Southern Pacific R. R. bridge 346B over the irrigation canal ; red-metal disk, (C. \& G. S. b. m. U ${ }_{7}$ )
$3,990.642$
Lovelocks, 50 meters east of station, 60 meters south of track, on north side of northwestern concrete pillar under railroad water tank ; red-metal disk (C. \& G. S. b. m. V I $_{\text {) }}$

3, 976.262
Perth, opposite station sign at railroad mileage 340.5 in second line of telegraph poles, 30 meters south of track, in cement or stone post ; red-metal disk (C. \& G. S. b. m. W 7 )

3, 949. 027
Granite Point, 20 meters west of milepost 336, at edge of a hummock, 100 meters west of section foreman's house, 60 meters north of track, 2.5 meters south of line fence, in cement or stone post; red-metal disk; (C. \& G. S. b. m. X ${ }_{7}$ )

3, 918.408

Toulon, at railroad mileage 331.8 , 11.4 meters north of station sign,
18.5 meters north of track, in first line of telegraph poles, in cement or stone post; red-metal disk (C. \& G. S. b. m. Y $\mathrm{Y}_{7}$ )

Feet. 3, 929.605
Toy, 30 meters west of station, 28.5 meters north of track, 0.9 meter outside of west fence inclosing section foreman's house, 9.6 meters north of southwest angle of inclosure, in cement or stone post; redmetal disk (C. \& G. S. b. m. Z $\mathrm{Z}_{7}$ )

3, 930.271

From Oreana east 3.5 miles along Southern Pacific $R$. R. to crossing of Lovelocks water pipe. (Leveling by L. F. Biggs in 1916 checked approximately by water works line from Lovelocks.)

Oreana, on top surface of southeast one of four central pillars under Southern Pacific R. R. (U. S. C. \& G. S. b. m. Q17)

4,157. 957
Oreana, in front of station; top of rail (U. S. C. \& G. S.)
4,156. 29
Oreana, 1 mile northeast of, 15 feet north of track, in base of telephone pole; spike, painted "U. S. 4,169 B. M."

4, 169. 02
Oreana, 3 miles northeast of, 30 feet north of switch to Limerick Canyon; iron post stamped " 4,30211916 "

4, 301.783
Oreana, 3.5 miles northeast of, 300 feet northeast of crossing of Southern Pacific R. R. and Lovelocks water pipe; top of stake (Lovelocks water works bench mark marked " U. S. C. \& G. S. Lovelocks 4,327.16")
$4,326.89$
From point 3.5 miles east of Oreana along highways northeast and east to Rochester, thence south and west to point of beginning.

Oreana, 4.8 miles northeast of, 50 feet west of switch, at mouth of Limerick Canyon; summit of flat boulder, painted "U. S. 4,462 B. M."
$4,461.76$
Oreana, 5.9 miles northeast of, 1 mile east of mouth of Limerick Canyon, 10 feet east of road; summit of boulder, painted "U. S. 4,712 B. M."

4, 711. 49
Oreana, 7 miles east of, in Limerick Canyon, 600 feet west of cottonwood trees, at spring, 10 feet south of road, in top of boulder; bronze tablet stamped " 5,02621916 "

5, 026.051
Rochester, 4 miles west of, south edge of road, on rhyolite ledge; paint point, painted " U. S. 5,327 B. M."
$5,327.24$
Rochester, 3 miles west of, in Limerick Canyon, 50 feet east of trees at spring; bronze tablet in face of rhyolite ledge, stamped " 5674 5 1916"

5, 673. 783
Rochester, 2 miles west of, on northeast corner of Sterrick Concentrating machine, painted "U. S. 5,806 B. M."
$5,806.13$
Rochester, 1 mile west of, west edge of road at summit between Rochester and Limerick canyons, painted on rock "U. S. 6,274 B. M."-- 6, 274.92
Rochester, 200 feet southeast of post office, 100 feet south of road; iron post stamped " 6,237 61916 "

6,237. 110
Rochester, 0.5 mile south of, 40 feet west of trail that runs through Saddlebit, Rochester, and Weaver canyons; bronze tablet in rhyolite ledge, stamped "6,670 71916 "

6,671. 046
Rochester, 1 mile south of, east edge of trail where it crosses gulch; top of boulder, painted "U. S. 6,258 B. M."

6, 258. 16
Rochester, 1.5 miles south of, in Weaver Canyon, 60 feet north of two tents, 100 feet east of spring; top of boulder, marked " U . S. 5,957 B. M."

5, 957.28

Rochester, 2.5 miles south of, in Weaver Canyon, 80 feet north of tent, 80 feet west of spring, top of rock, marked "U. S. 5,650 B. M." $\qquad$ $5,650.39$
Rochester, 3.5 miles south of, in Weaver Canyon, 4 miles north of power line crossing, east side of gulch and road; bronze tablet in rhyolite ledge, stamped " 5,50681916 "

5, 505. 876
Packard station, 1 mile south of, 200 feet north of saddle, 300 feet east of road forks; top of white 4 by 4 inch stake marked "U. S. 5,420 B. M." $\qquad$ $5,420.52$
Power Rochester, 1 mile west of, 20 feet south of track at Packard station; iron post stamped " 5,25741916 "

5, 256. 749
Packard station, 1.4 miles west of, west end of trestle; nailhead painted "U. S. 4,917 B. M."

4, 917.11
Oreana, 6.7 miles east of, 50 feet west of bridge across Big Draw, 50 feet south of track; iron post stamped " 4,74931916 "

4, 749. 027
Oreana, 4.9 miles east of, 10 feet south of track; spike in base of telephone pole, painted "U. S. 4,480 B. M."
$4,480.52$
MILL CITY QUADRANGLE.
[Latitude $40^{\circ} 30^{\prime}-41^{\circ}$; longitude $118^{\circ}-118^{\circ} 30^{\prime}$.]
From Dodon southwest along Southern Pacific R. R. to Valery. (Precise leveling by U. S. Coast and Geodetic Survey.)
Dodon, 4 telegraph poles west of milepost 393 , opposite station sign, 59.8 meters south of track, 1.6 meters north of south fence, in cement or stone post ; red-metal disk (C. \& G. S. b. m. F F ) $_{-}$ $4,252.623$
Mill City, 175 meters west of station, in second line of telegraph poles, 0.6 meter east of east fence around a yellow frame building, 37.6 meters south of track, in cement or stone post; red-metal disk (C. \& G. S. b. m. G ${ }_{7}$ )
$4,224.033$
Imlay, on top of northeastern concrete pillar under railroad water tank; red-metal disk (C. \& G. S. b. m. H )
$4,194.959$
Humboldt, on south side of concrete foundation under yellow-painted building of Southern Pacific R. R. opposite water tank, about 75 meters west of station, 25 meters north of track; red-metal disk (C. \& G. S. b. m. $\mathrm{I}_{7}$ )
$4,232.423$
Valery, 300 meters east of station sign, 200 meters west of milepole 373,60 meters north of track, 1 meter south of north line fence, 4 meters east of a gate in fence, in cement or stone post; red-metal disk (C. \& G. S. b. m. J J )
$4,278.548$
Valery, 3 miles west of, at railroad mileage 369.9 , in top surface of south head wall of culvert under eastbound track of Southern Pacific R. R. ; top of round-headed iron bolt, Southern Pacific R. R. b. m. (C. \& G. S. b. m. K ${ }_{\tau}$ )
$4,245,949$

## PALISADE QUADRANGLE.

[Latitude $40^{\circ} 30^{\circ}-41^{\circ}$; longitude $116^{\circ}-116^{\circ} 30^{\prime}$.]
From Vivian west along Southern Pacific R. R. to Beowawe. (Precise leveling by U. S. Coast and Geodetic Survey.)
Vivian, 65.9 meters south of station sign, on right of way of Southern Pacific R. R., 59.6 meters south of main track, 1.4 meters north of line fence between Southern Pacific R. R. and Western Pacific Ry., 16.3 meters north of Western Pacific track, 9.3 telegraph poles east of Western Pacific milepole 647, 2.8 telegraph poles west of Southern Pacific milepole 539, in top of stone post; bottom of square hole (C. \& G. S. b. m. Ss)

Carlin, in grass plot halfway between Southern Pacific Hotel and Southern Pacific R. R. station, 1 meter south of front fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. T 5 ) _-_- 4, 896. 834
Carlin, 2 miles west of, 100 meters west of crossing $534 \mathrm{~A}, 41$ meters north of milepost 534, 56 meters north of Southern Pacific R. R. track, 1.7 meters south of north line fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. U )
T'yrol, approximately at milepole 532.6, 7.5 meters east of station sign, 13.7 meters east of Southern Pacific R. R. main track, 1.4 meters west of east line fence (C. \& G. S. b. m. V 5 )
Palisade, 75 meters west of west end of Southern Pacific R. R. bridge No. 16 over Humboldt River, 30 meters east of tunnel No. 1, 13.7 meters north of track, 14.5 meters south of north line fence, 1 meter east of a telegraph pole, in top of stone post; bottom of square hole (C. \& G. S. b. m. W s)
Gerald, near fence corner at west end of siding, 8 telegraph poles west of station sign, 29.2 meters south of track, 1 meter from south line of fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. $\mathrm{X}_{5}$ )
$4,820.079$
Harney, 2.4 telegraph poles east of milepole $518,6.6$ poles west of station sign, 30 meters north of track, 0.6 meter south of fence, in top of stone post; bottom of square hole (C. \& G. S. b. m. Y )
Cluro, 3.3 telegraph poles east of station sign and of Southern Pacific R. R. milepole 514, 5.3 meters south of second telegraph pole west of Western Pacific Ry. milepole 623, 26.8 meters north of Southern Pacific track, 34.5 meters south of north line fence, 19.1 meters south of the Western Pacific Ry. track, in top of stone post; bottom of square hole (C. \& G. S. b. m. Z 5 )
Beowawe, in top surface of concrete base of signal tower 510.1 at east end of siding; red-metal disk (C. \& G. S. b. m. A $)$ $\qquad$ $4,699.997$
Beowawe, in top surface of concrete foundation (center pier) of Western Pacific Ry. water tank; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{B}_{6}$ )
$4,698.849$
Beowawe, 25 meters west of west end of Southern Pacific R. R. station, 26 meters south of Western Pacific Ry, track, 19.8 meters north of Southern Pacific R. R. track, in top of stone post; bottom of square hole (C. \& G. S. b. m. C ${ }^{\text {) }}$ )
$4,693.849$

## PANACA QUADRANGLE (NORTHEAST QUARTER OF PIOCHE QUADRANGLE).

$$
\text { [Latitude } 37^{\circ} 30^{\prime}-38^{\circ} \text {; longitude } 114^{\circ}-114^{\circ} 30^{\prime} . \text { ] }
$$

From Caliente along San Pedro, Los Angeles \& Salt Lake R. R. northeast to Del Mues, thence northwest and southwest to Pioche, thence west along highway to Point mine. (Primary leveling by D. S. Birkett in 1914-15.)
Caliente, at corner of Culverwell Avenue and Market Street, on face of public-school building toward Culverwell Avenue, 1.8 meters above ground; red-metal disk (C. \& G. S. b. m. Q ${ }_{2}$ )
Caliente, 1.1 miles north of railroad station, 30 feet south of road crossing, on east side of Pioche branch track, in base of telephone pole; railroad spike marked "U. S. B. M. 4434 "
Caliente, 2 miles north of, 400 feet north of milepost 2, in base of telegraph pole; railroad spike marked "U. S. B. M. 4439 "
Caliente, 3 miles north of, on Pioche branch, 85 feet south of milepost 3, 15 feet east of track, in large boulder; aluminum tablet stamped " 44641914 1"

Caliente, 4 miles north of, in base of milepost 4 ; railroad spike Feet. marked "U. S. B. M. 4491 " $4,490.91$
Caliente, 5 miles north of, in base of milepost 5 ; railroad spike marked "U. S. B. M. 4506 "
$4,506.28$
Caliente, 6 miles north of, 45 feet south of section house, 150 feet south of milepost 6,50 feet east of track; iron post stamped " 454719142 "

4, 546. 792
Caliente, 7 miles north of, 400 feet north of milepost 7,175 feet north of trestle 7 A , in telegraph pole; railroad spike marked "U. S. B. M. $4571 "$ $\qquad$ 4,570. 51
Caliente, 8 miles north of, 200 feet north of milepost 8 , in base of telegraph pole; railroad spike marked " U. S. B. M. 4593 " $4,593.06$
Panaca, 5.4 miles south of, 800 feet north of milepost 9 , on north end of trestle 9 A , in east end of bulkhead; railroad spike marked "U. S. B. M. 4622 "
Panaca, 4.5 miles south of, in base of milepost 10 ; railroad spike marked "U. S. B. M. 4650 "
Panaca, 4.2 miles south of, 0.3 mile north of milepost 10,120 feet west of railroad track, on south side of private gate; iron post stamped " 465519143 "
Panaca, 3.5 miles south of, 200 feet north of milepost 11, in telegraph pole; railroad spike marked "U. S. B. M. 4666 "
Panaca, 2.5 miles south of, 400 feet north of milepost 12 , in base of telegraph pole; railroad spike marked " U. S. B. M. 4680 "
Panaca, 1.5 miles south of, 200 feet south of milepost 13, in telegraph pole; railroad spike marked "U. S. B. M. 4693 "
Panaca, 0.55 mile south of, 175 feet south of milepost 14 , on east side of south end of trestle 13 C ; top of drift bolt painted white, marked "U. S. B. M. 4727 "

4, 727. 17
Panaca, 230 feet north of signboard, 100 feet south of road crossing, 50 feet east of railroad track; iron post stamped " 473319144 "-

4, 733.136
Milepost 15 ; top of rail opposite
4, 732.6
Panaca, 1.4 miles north of, 200 feet south of milepost 16 , in base of telegraph pole; railroad spike marked "U. S. B. M. 4767 "
$4,766.77$
Panaca, 2.75 miles north of, 1,300 feet north of milepost 17,50 feet east of track, on top of boulder 4 feet high; bronze tablet stamped " 483219145 "
$4,831.925$
Panaca, 3.5 miles north of, 80 feet north of milepost 18 , on west side of south end of bridge 18 A ; top of drift bolt painted white, marked "U. S. B. M. 4885 "
Panaca, 4.5 miles north of, 200 feet north of milepost 19 , in base of telegraph pole; railroad spike marked "U. S. B. M. 4952 " 4, 951.40
Del Mues, 1.5 miles south of, in base of milepost 20 , railroad spike marked "U. S. B. M. 5018 "

5, 018.06
Del Mues, 1.1 miles south of, 50 feet north of present location of water tank, 20 feet west of track, in concrete foundation of old tank; bronze tablet stamped " 505719146 "
Del Mues, 60 feet west of signboard, in base of telegraph pole; railroad spike marked "U. S. B. M. 5108 "
$5,107.71$
Del Mues, 0.35 mile northwest of, in center of trestle 21 C ; top of rail
Del Mues, 0.55 mile northwest of, in base of milepost 22, railroad spike marked " U. S. B. M. 5121 "
$5,120.78$

Del Mues, 1.6 miles northwest of, in base of milepost 23 ; railroad Feet.

Del Mues, 2.6 miles northwest of, 165 feet north of milepost 24,15 feet west of track, on top of large boulder; bronze tablet stamped " $52671915 \quad 7$ " 5,266. 609
Del Mues, 3.5 miles northwest of, opposite milepost 25,20 feet west of track, in base of bäck side of emergency rail stand; railroad spike marked " U. S. B. M. 5361 " $5,360.47$

Pioche, 6.9 miles southeast of, in base of milepost 26 ; railroad spike
marked "U. S. B. M. 5445 "

$5,444.99$

Pioche, 5.9 miles southeast of, in base of milepost 27 ; railroad spike marked "U. S. B. M. 5493 "
$5,492.48$
Trestle 27 B, 200 feet north of, at road crossing; top of rail_........ 5, 462.4
Pioche, 3 miles east of, 3.9 miles south of railroad station, 35 feet south of milepost 29,60 feet east of railroad, 40 feet south of wagon road; iron post stamped " 543519158 "
$5,434.636$
Pioche, 2.6 miles east of railroad station along track, in base of milepost 30 ; railroad spike marked "U. S. B. M. 5457 " 5, 456. 70
Pioche, 1.6 miles northeast of, along railroad, in base of milepost 31; railroad spike marked " U. S. B. M. 5474 "

5, 473. 29
Signpost " Pioche 1 mile"; top of rail opposite 5, 562.9
Pioche, opposite operator's window in railroad station; top of nearest rail
$5,725.2$
Pioche, on water tank of San Pedro, Los Angeles \& Salt Lake R. R., on north side of concrete foundation; bronze tablet stamped " 5725 $1915 \cdot 19$ "

5, 724. 452
Pioche, 0.7 mile northwest of railroad station, at road crossing, 15 feet north of Prince Consolidated Mining Co.'s railroad track, in base of railroad crossing signpost; railroad spike marked "U. S. B. M. 5738 "
Pioche, 2.4 miles northwest of, 0.3 mile southeast of crossing of Prince Consolidated Mining Co.'s railroad and Jackrabbit mine railroad, at point where lower road to Bristol Pass crosses Prince Consolidated Mining Co.'s railroad, 12 feet southwest of wagon road, 30 feet south of railroad; iron post stamped " 58991915 "
Pioche, 2.6 miles northwest of, at point where Prince Consolidated Mining Co.'s railroad crosses Jackrabbit mine railroad; top of rail_
Pioche, 3.8 miles northwest of, at crossing of wagon road to the "Point" and Prince Consolidated Mining Co.'s railroad, in base of railroad crossing signpost; railroad spike scribed "U. S. B. M. 6018"
Pioche, 4.3 miles northwest of, 400 feet south of forks of three roads leading to Bristol Pass, Stampede Pass, and Prince Consolidated mine, 30 feet west of the latter road, about midway between two red buildings belonging to the Point mine; iron post stamped "6066 191520 "

6, 065.893
From Panaca southwest along highways to Bennet Springs.
Panaca, 5.9 miles west of, 3.8 miles east of Bennet Springs, about 2.5 miles up the wash from railroad track, at foot of third conspicuous point on south side above the railroad, 140 feet south of road; iron post stamped " 4790191521 "

Bennet Springs, 2.4 miles east of, on point between two main forks of wash, 140 feet north of road, in base of 8 -inch cedar tree; railroad spike marked " U. S. B. M. 4929 "

Feet.
Bennet Springs, 1.6 miles east of, 500 feet west of point where road
leaves wash and mounts bench, 90 feet north of road, in base of juniper tree; railroad spike marked "U. S. B. M. 5033 " 5, 033. 21
Bennet Springs; surface of artificial pond February 23, 1915___ 5, 259.1
Bennet Springs, 200 feet west of old house, 75 feet south of road, about 350 feet northwest of main spring, at foot of slope; iron post stamped " 5276191522 "

5, 276. 013

From point 3 miles east of Pioche along highway northeast to Little Summit, thence southeast to Modena, Utah. (Utah portion in another list.)

Pioche, about 4.5 miles east of, 1.4 miles east of railroad crossing, near top of bench, 3 feet south of Rose Valley road, on top of boulder; painted circle marked "U. S. B. M. 5477 " 5, 476. 25
Pioche, about 5.5 miles east of, on top of small ridge, 25 feet south of road, in base of juniper stump; railroad spike scribed " $U$. S. B. M. 5585 " 5, 584. 29
Rose Valley School, 4.3 miles west of, 120 feet south of road, about 12 feet above road level, in base of juniper tree; railroad spike scribed "U. S. B. M. 5713 " 5, 712. 76
Rose Valley School, 3.1 miles west of, on plateau, 75 feet east of fork in road, 20 feet south of road; iron post stamped " 586819159 "-5, 867.598
Rose Valley School, 1.6 miles west of, on east edge of plateau where road turns down hill, 6 feet north of road, in top of boulder; bronze tablet stamped " 5906191510 "

5, 905. 660
Rose Valley School, 1 mile west of, 15 feet south of road, in base of cedar stump; railroad spike marked "U. S. B. M. 5699 "

5, 698. 20
Rose Valley School, 150 feet northeast of, 80 feet north of Meadow Valley Creek, on north side of road, in top of large boulder; bronze tablet stamped " 5396191511 "
$5,395.699$
Rose Valley School, 0.87 mile southeast of, near bottom of hill, where road turns up, 10 feet east of road; top of boulder marked "U. S. B. M. 5379 "

5, 378.23
Rose Valley School, 1.2 miles southeast of, about 150 feet above level of Rose Valley, 40 feet north of road; top of large boulder marked "U. S. B. M. 5558 "
$5,557.48$
Rose Valley School, 1.5 miles east of, about 250 feet above level of Rose Valley, 4 feet north of road, in top of large cubical boulder; bronze tablet stamped " 5641191512 "
$5,640.916$
Rose Valley School, 2.1 miles east of, near top of first bench, 2 feet south of road, in base of cedar tree; railroad spike marked "U. S. B. M. 5850 "
$5,849.98$
Rose Valley School, 3.1 miles east of, on hogback slope where road turns off down to Eagle Valley, on south side of road, in base of juniper tree; railroad spike marked " U. S. B. M. 5989 "
$5,988.40$
Rose Valley School, 4.1 miles east of, on hogback ridge, 12 feet north of road; iron post stamped " 6066191513 "
$6,065.868$
Rose Valley School, 5.6 miles east of, on sloping plateau, 15 feet south of road, in base of small juniper tree; railroad spike marked "U. S. B. M. 6196 "
$6,195.26$

Rose Valley School, 6.4 miles east of, about 0.2 mile west of road forks, 15 feet south of road, in base of juniper tree; railroad spike marked " U. S. B. M. 6267"

Feet.
Little Summit, 0.3 mile east of, 350 feet south of fork of Fay and Modena road, in base of cedar tree; railroad spike scribed "U. S. B. M. 6294 "

6, 293. 59
Big Summit, 2.4 miles west of, 0.5 mile east of fork of Modena and Fay roads, 3 feet south of Modena road; top of boulder 4 feet high stamped " 6366191514 "
$6,365.333$
Big Summit, 1 mile west of, 225 feet west of dry well, 15 feet north of road, in base of cedar tree; railroad spike scribed "U. S. B. M. $6533 "$

6,532. 24
Big Summit, 10.6 miles east of Rose Valley, 15.1 miles west of Modena, on summit of divide, 15 feet south of road; iron post stamped " 6680191515 "

6, 679. 513
Big Summit, 0.75 mile east of, 5 feet north of road, in base of juniper tree; railroad spike marked "U. S. B. M. 6487 "
$6,486.98$
Big Summit, 1.7 miles southeast of, 20 feet south of road, in base of 16 -inch juniper tree; railroad spike marked " U. S. B. M. 6341 "-- 6, 340.93
Big Summit, 2.5 miles southeast of, 20 feet north of road; top of boulder marked "U. S. B. M. 6231"

6,230. 62
Big Summit, 2.9 miles southeast of, 3.3 miles northwest of fork of Fay and Rose Valley roads, 0.55 mile northwest of old road forks leading to north, 170 feet northeast of Rose Valley road, about 20 feet above level of wash on hillside, 15 feet west of juniper tree scribed "B. M.," in top of boulder 18 inches high; bronze tablet stamped " 6207191516 "

6, 207.054
Big Summit, 3.8 miles southeast of, 2.4 miles northwest of fork of Fay and Rose Valley roads, 0.3 mile southeast of fork of Rose Valley road and old road leading north, 6 feet south of road; top of boulder marked "U. S. B. M. 6105 "

6, 105. 21
Big Summit, 4.6 miles southeast of, 1.6 miles northwest of fork of Fay and Rose Valley roads, 125 feet northeast of Rose Valley road, on point of slope about 4 feet above level of wash; top of boulder marked "U. S. B. M. 6034 "

6, 034.17
From Pioche northwest along highway 4.8 miles. (Primary leveling by Roscoe Reeves in 1915.)

Pioche, 2.4 miles northwest of, 0.3 mile southwest of crossing of Prince Consolidated Mining Co.'s and Jack Rabbit mine railroads, 12 feet southwest of wagon road, 30 feet south of railroad; iron post stamped " 5,899 " (Birkett's 1914-15 line)
$5,898.320$
Pioche, 3.4 miles northwest of, 1.04 miles north of railroad crossing, 50 feet west of road; copper nail in cedar tree, painted " 5,864 " $-\ldots 5,864.21$

## At Pioche.

Pioche, on east side of main entrance to Thompson's store, beneath center of show window, on stone sill; chalked cross, painted " 6,080 " $\qquad$ 6, 080.06
Pioche, 0.5 mile west of, at shops of Amalgamated Pioche Mines \& Smelters Corporation, 30 feet south of collar of shaft, on west side of main entrance to room of hoisting engines, at base of southwest brace of derrick support; top of concrete pillar; bronze tablet stamped " 6,347 "

Pioche, in capstone to main entrance of Lincoln County courthouse, Feet. north side of entrance; bronze tablet, stamped " 6,064 "
Leith, 15 meters west of center line of main track of railroad, on side of concrete section house facing track, 430 meters north of signboard "Leith," 1.6 meters above ground; red-metal disk (C. \& G. S. b. m. $\mathrm{B}_{2}$ ) $2,933.245$
Leith, 1.3 miles north of, on southwest end of southeast concrete abutment of railroad bridge $429 \mathrm{~B}, 100$ meters northwest of signboard "Leith one mile," 3.8 meters southwest of center line and 2 meters below top of rail ; copper bolt set vertically in cement (C. \& G. S. b. $\mathrm{m} . \mathrm{C}_{3}$ )

2, 997. 383
Leith, 3.9 miles north of, in southwest end of southeast concrete abutment of bridge 431 G of railroad, 3.4 meters southwest of center line and 0.5 meter below top of rail; copper bolt set vertically in cement (C. \& G. S. b. m. D ${ }_{2}$ )
$3,144.672$
Kyle, 28 meters northeast of center line of main track of railroad, directly opposite signboard "Kyle," on east side of highway which crosses tracks at this point, 1.1 meters above top of rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. E E )

3, 235.335
Kyle, 1.4 miles north of, set vertically in northeast concrete wall of culvert 434 A of railroad, 7.2 meters northeast of center line and 2.5 meters below top of rail ; copper bolt in cement (C. \& G. S. b. m. F F ) - 3, 285. 935

PIOCHE QUADRANGLE.
[Latitude $37^{\circ}-38^{\circ}$; longitude $114^{\circ}-115^{\circ}$.]
From Carp northeast along San Pedro, Los Angeles \& Salt Lake R. R. to Lien. (Precise leveling by U. S. Coast and Geodetic Survey.)

Carp, 15 meters southeast of center line of main track of railroad, in face of concrete section house facing track, 50 meters southwest of telegraph station, 1.6 meters above ground; red-metal disk (C. \& G. S. b. m. $\mathrm{X}_{1}$ )

Carp, 70 meters northeast of telegraph station, 20 meters northwest of center line of main track of railroad, in northeast radial plane of circular stone wall of pump well, 0.5 meter above ground, set horizontally in cement; copper bolt (C. \& G. S. b. m. Y 1 )
$2,588.282$
Carp, 500 meters northeast of telegraph station at Carp, 25 meters southwest of point of switch at north end of Carp siding and 48 meters northwest of center line of main track of railroad, 17 meters outside of right-of-way fence, 0.6 meter above top of rail, at foot of rocky point, in top of stone post; bottom of square hole (C. \& G. S. b. m. $Z_{1}$ )

St. George, 126 meters south of signboard "St. George," 138.8 meters west of center line of main track of railroad, 107.6 meters west of right of way fence, 1 meter above top of rail opposite bench mark; at foot of cliff above broad sandy wash, in top of stone post; bottom of square hole (C. \& G. S. b. m. A ${ }_{2}$ )
Elgin, 0.3 mile south of telegraph station, directly opposite milepole 438,22 meters east of center of main track of railroad, 2.5 meters east of right of way fence line near foot of cliffs, in top of stone post ; bottom of square hole (C. \& G. S. b. m. G $\mathrm{G}_{2}$ )
$3,450.413$

Elgin, 135 meters north of telegraph station, 11 meters east of center line of main track of railroad, on side of concrete section house facing tracks, 1.6 meters above ground; red-metal disk (C. \&. G. S. b. $\mathrm{m} . \mathrm{H}_{2}$ )

Feet.
Elgin, 4.9 meters east of center line of track of railroad, on steel base of west one of three southerly tank columns, letters " U. S. B. M." cut in face of concrete pier ; chiseled square (C. \& G. S. b. m. I ${ }_{2}$ ) - 3, 464. 619
Boyd, 420 meters southeast of station sign "Boyd," 75 meters northwest of point of switch at south end of Boyd siding, 18.2 meters northeast of center line of main track of railroad, 2.5 meters northeast of right of way fence, in line with north fence at highway crossing ; red-metal disk on top of iron post (C. \& G. S. b. m. J $)_{--}$3, 775. 800
Boyd, 3.9 miles north of, opposite Carson's ranch, in east wing wall of north concrete abutment of bridge 446 A of railroad, 3 meters east of center line and 3.8 meters north of south face of abutment; copper bolt set vertically in cement (C. \& G. S. b. m. K ${ }_{2}$ )

3, 926.442
Stine, 125 meters north of signboard "Stine," 27 meters east of center line of main track of railroad, 1.9 meters outside right of way fence, 2.2 meters north of angle in fence line, 14 meters above top of rail, at the foot of white cliffs opposite power plant of Delamar mine, in top of stone post; bottom of square hole (C. \& G. S. b. m. L 2 )

Cana, 0.8 mile north of signboard "Stine," 15 meters west of center line of main track of railroad, in face of concrete section house facing track, 1.5 meters above ground; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{M}_{2}$ )

Stine, 3.2 miles north of, on southeast concrete wall of culvert 450 D of railroad, 4.1 meters southeast of center line and 1 meter below top of rail; copper bolt in cement (C. \& G. S. b. m. N $\mathrm{N}_{2}$ )
$4,156.189$
Etna, 155 meters southeast of center of bridge $453 \mathrm{~A}, 340$ meters southwest of point of switch at northeast end of Etna siding, 48 meters northwest of center line of main track of railroad, 17.5 meters outside right of way fence, 0.4 meter below top of rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. $\mathrm{O}_{2}$ ) --
Caliente, 11.5 meters southeast of center line of main track of railroad, on concrete foundation of railroad station facing track, directly beneath agent's office, 0.3 meter above ground; red-metal disk (C. \& G. S. b. m. P ${ }_{2}$ )

4,389. 735
Caliente, at corner of Culverwell Avenue and Market Street, on face of public-school building toward Culverwell Avenue, 1.8 meters above ground; red-metal disk (C. \& G. S. b. m. Q ${ }_{2}$ )

4, 402. 200
Caliente, on west side of South Spring Street, 294 meters south of center line of main track of railroad, 36 meters west of line (produced) of west face of "company row" of houses on North Spring Street, at foot of wash from hill, 15 meters above railroad track, in top of stone post; bottom of square hole (C. \& G. S. b. m. R2) --
Caliente, 50 meters southeast of center line of main track of railroad, on face of Caliente Mercantile Co.'s store on Clover Street, 1.5 meters above ground; red-metal disk (C. \& G. S. b. m. S $\mathrm{S}_{2}$ )

Caliente, 45 meters southeast of center line of main track of railroad, in face of concrete section house facing track, 1.6 meters above ground; red-metal disk (C. \& G. S. b. m. T2)
$4,412.471$

Eccles, 41 meters south of center line of main track of railroad, 220 meters west of east end of Eccles siding, in a small niche in
high cliff, 1.1 meters above top of rail, in top of iron post; redmetal disk (C. \& G. S. b. m. U $\mathrm{U}_{2}$ )

Feet. 4,625.010
Minto, 2 miles northwest of, 3.5 meters east of center line of main track of railroad, on east end of south concrete abutment of bridge $465 \mathrm{~B}, 0.5$ meter below top of rail; copper bolt in cement (C. \& G. S. b. m. V ${ }_{2}$ )
$4,715.686$
Minto, 30.3 meters southwest of center line of main track of railroad, 30.5 meters from signboard "Minto," near foot of cliffs, 0.2 meter above top of rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. W ${ }_{2}$ )
$4,810.666$
Big Springs, 6.3 meters west of center line of main track of railroad, 45 meters south of section house, on west wall of stone culvert
470 E. 2.2 meters below top of rail; red-metal disk set vertically (C. \& G. S. b. m. X ${ }_{2}$ )
$5,061.971$
Islen, 200 meters west of signboard "Islen," 21.1 meters south of center line of main track of railroad, at foot of high white cliffs, 1 meter above top of rail, on top of iron post; red-metal disk (C. \& G. S. b. m. $\mathrm{Y}_{2}$ )

5, 223. 828
Barclay, 0.7 mile east of signboard "Barclay," 15 meters northwest of center line of main track of railroad, directly in front of fence at Wood's ranch (Barclay post office) facing highway, 0.3 meter below top of rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. $\mathrm{Z}_{2}$ )
$5,332.788$
Acoma, 65 meters southwest of station, 10.4 meters northwest of center line of main track, 0.2 meter below top of rail, on top of iron post ; red-metal disk (C. \& G. S. b. m. As)
$5,517.899$
Acoma, 50 meters northeast of station, 3.9 meters northwest of center of main track, in southwest end of concrete pier of water tank nearest main track; copper bolt in cement (C. \& G. S. b. m. B ${ }_{3}$ )
Acoma, 25 meters northwest of center line of main track of railroad, in face of concrete bunk house toward track, 0.7 meter above top of rail; red-metal disk (C. \& G. S. b. m. C ${ }_{3}$ )

5, 526. 003
Acoma, 1.8 miles northeast of, 5.8 meters north of center line of main track of railroad, on south wall of stone culvert $483 \mathrm{~B}, 2$ meters below top of rail; bottom of square hole, marked " U. S. B. M." (C. \& G. S. b. m. D ${ }_{3}$ )
$5,608.046$
Brown, 19 meters southeast of center line of main track of railroad, directly opposite signboard "Brown," 1 meter above top of rail, in top of stone post ; bottom of square hole (C. \& G. S. b. m. E E ${ }_{3}$ )
Crestline, 29 meters west of center line of main track of railroad, in face of concrete bunk house facing track 1.6 meters above ground; red-metal disk (C. \& G. S. b. m. F $\mathrm{F}_{3}$ )
$5,780.507$

Crestline, 23 meters east of center line of main track of railroad, 5 meters north (measured along track) of signboard "Crestline," 0.9 meter above top of rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. G ${ }_{3}$ )
$5,984.244$
Lien, 19 meters north of center line of main track of railroad, opposite signboard "Lien," 0.8 meter above top of rail, in top of iron post ; red-metal disk (C. \& G. S. b. m. H ${ }_{3}$ )
$5,803.811$

PYRAMID LAKE QUADRANGLE.
[Latitude $40^{\circ}-40^{\circ} 30^{\prime}$; longitude $119^{\circ} 30^{\prime}-120^{\circ}$.]
Elevations by water leveling along west shore of Pyramid Lake to north end, thence 7 miles along highway to bridge 402, Western Pacific Ry., by General Land Office in 1911.

Symond's ranch, 3 miles southeast of, 300 feet north of prominent
limestone point, on low ledge jutting into lake; cross mark witnessed by an arrow

Feet. 3, 869.30
Pyramid Lake, at middle latitude point, water surface:
July 1, 1911 3, 869.1
July 14, 1911 3, 869.1
Aug. 8, 1911 3, 868.9
Aug. 27, 1911 3, 868.4
Sept. 5, 1911 3, 868.1
Oct. 10, 1911 3, 867 . 3
Note.-The orthometric elevation of this lake is 0.07 foot lower at north end and 0.07 foot higher at south end than the height at middle latitude point.
Symond's ranch, 0.25 mile southeast of, in forks of road, 175 feet from lake shore, about 200 feet south of meander corner of secs. 35 and 2 , Tps. 25 and 26 N., R. 20 E.; iron post stamped " 3889 " $3,884.108$
Symond's ranch, 3 miles north of, 300 feet east of prominent rocky cove, 75 feet from lake shore, near meander corner of secs. 15 and 22, T. 26 N., R. 20 E. ; iron post stamped " 3886 " $3,880.689$
Gage No. 7 (a point 125 feet northwest from b. m. No. 7), marked with a circle and the letters U. S. B. M

3, 869.04
The Needles, north end of, close to line between Tps. 26 and 27 N . R. 20 E ., on south side of sec. 36 , on west side of first rocky peak on peninsula, 50 feet from lake shore, set in face of large boulder; bronze tablet stamped " 3881 " 3, 876. 640
Pyramid Lake, north end of, about 100 feet west of road along shore of lake, about 300 feet west of corner of secs. $4,5,32$, and $33, \mathrm{Tps} .27$ and 28 N., R. 21 E. ; 3-inch iron post

3, 887.590
Intersection of roads 3, 927
Pyramid Lake, opposite point projecting to east, first point in pass north from lake, on alkali flat; top of rock 1 foot square

3, 931.14
Pyramid Lake, 5.6 miles north of, opposite rocky point on divide in pass, 2 feet east of road; cross on boulder

3, 965.51
Western Pacific Ry., 1,000 feet east of, 7.3 miles north of Pyramid Lake, about 0.25 mile south of intersection of two passes; on side of road 3, 936. 71
Bridge 402, near station 7228 of Western Pacific Ry.; top of rail_-_ 3, 966. 0
Bridge 402, 250 feet north of, 50 feet east of Western Pacific Ry.; iron post

3, 963.12
RENO QUADRANGLE.
[Latitude $39^{\circ} 30^{\prime}-40^{\circ}$; longitude $119^{\circ} 30^{\prime}-120^{\circ}$.]
From Clark west along Southern Pacific R. R. to Marmol. (Precise leveling by U. S. Coast and Geodetic Survey.)

Clark, 100 meters east of east end of siding, in top surface of west concrete abutment of bridge 8 over Truckee River ; top of a roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. Z. )
$4,246.173$

Ditho, 0.5 mile east of, at railroad mileage 258.1, in top surface of east abutment of bridge 7 over Truckee River; top of a round-headed Feet. iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. A ${ }_{0}$ )

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4,296.215
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Hafed, at railroad mileage 253.1, 40 meters east of station sign, 29.4 meters south of track, on top of large black boulder 3 meters high; red-metal disk (C. \& G. S. b. m. B )

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4,376.822
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Vista, at railroad mileage 251, on top surface of east abutment of bridge 6 over Truckee River; top of a round-headed iron bolt. (S. P. R. R. b. m.) (C. \& G. S. b. m. C $\mathbf{0}_{0}$ ) $4,390.227$
Vista, 1.4 miles east of, on west abutment of small bridge 250 B ; top of a round-headed iron bolt. (S. P. R. R. b. m.) (C. \& G. S. b. m. $\mathrm{D}_{9}$ )

4, 390.713
Vista, 0.6 mile east of, at railroad mileage 249.8, on top surface of east abutment of bridge 5 over Truckee River; top of a roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. E ${ }_{9}$ )
$4,395.195$
Vista, 10.6 meters south of milepole 249, 25.2 meters south of track, 0.2 mile west of station sign, in angle formed by fence at grade crossing with the south line fence, northwest of highway ; red-metal disk set in cement or stone post (C. \& G. S. b. m. Fo)
Sparks, at railroad mileage 246.3, 250 meters west of railroad station, in angle formed by high board fence at grade crossing, 1 meter from fence corner, 14.9 meters north of track; in cement or stone post; red-metal disk (C. \& G. S. b. m. Gg)
$4,422.255$
Lawton, 0.3 mile east of railroad station, 120 meters east of milepole 238, on top of large brown boulder 1.5 meters high, 15 meters north of westbound track; red-metal disk (C. \& G. S. b. m. Jo)
Verdi, 2 miles east of, at mileage 234.1 on old line of Southern Pacific R. R., on east abutment of bridge 4 over Truckee River; red-metal disk (C. \& G. S. b. m. Ko)

4, 789.751
Verdi, top of western inside base bolt of signal tower 2329, which is "distant" signal for east end of Verdi siding (C. \& G. S. b. m. $\mathrm{L}_{\mathrm{g}}$ )

Marmol, at railroad mileage 230.5, in cow pasture opposite large red building, 75 meters south of track, 20 meters west of east pasture fence, 7 meters north of south pasture fence, 100 meters east of bench mark $\mathrm{E}_{6}$, in top of black boulder; top of a round-headed iron bolt (C. \& G. S. b. m. Fef
$4,960.449$
Marmol, at railroad mileage 230.5, in cow pasture opposite large red building, 65 meters south of track, 60 meters east of west pasture fence, 10 meters north of the south pasture fence, on top of large boulder; red-metal disk (C. \& G. S. b. m. E E )

4,961. 893
Marmol, 0.6 mile southwest of, on top of east abutment of railroad bridge over Truckee River; red-metal disk (C. \& G. S. b. m. D D $_{6}$ _- 4, 969. 580

From Reno south along Virginia \& Truckee Ry. to Carson City, thence east to Mound House and northeast along Southern Pacific R. R. to Dayton. (Precise leveling by U. S. Coast and Geodetic Surver.)
Reno, in granite top of north balustrade of east entrance to city hall; brass plate 2 by 4 inches (C. \& G. S. b. m. $\mathrm{H}_{0}$ )
Note.-The elevation marked on the top is 96.72 feet above the zero of the city system of levels.
Reno, on main building of Nevada State University, in side of northeast corner stone; bronze tablet stamped " 4554.817 " (U. S. G. S.) (C. \& G. S. b. m. I $\mathrm{I}_{9}$ )
$4,557.179$

Reno, in north end of abutment of highway bridge over Truckee Feet. River ; red-metal disk (C. \& G. S. b. m. M ${ }_{9}$ ) $4,489.643$
Reno, 3 miles south of, 75 meters southeast of school house opposite Wingate's stock farm, 5 meters east of Virginia \& Truckee Ry. tracks, in line with telegraph poles, 50 meters south of a road crossing; in top of iron post ; red-metal disk (C. \& G. S. b. m. N ${ }_{\circ}$ ) _- 4, 440. 447
Reno, 5 miles south of, 1.75 miles north of Huffaker, in second pier from south end of railroad bridge over a creek; red-metal disk (C. \& G. S. b. m. O ${ }_{2}$ )
$4,455.368$
Huffaker, near north end of switch, in a fence corner 5 meters east of railroad tracks, near a road cross, in top of iron post; redmetal disk (C. \& G. S. b. m. Po
$4,505.116$
Reno, 9 miles south of, at south end of a siding, 50 meters north of switch stand, east of tracks, in line with telegraph poles, in top of iron post ; red metal disk (C. \& G. S. b. m. Qo)

4, 543. 393
Steamboat Springs, in southwest corner of south abutment of railroad culvert, in top of stone post ; bottom of square hole (C. \& G. S. b. m. R ${ }_{0}$ )
$4,600.847$
Steamboat Springs, 1.5 miles south of, 8 meters east of railroad tracks, in top of iron post; red-metal disk (C. \& G. S. b. m. S9) _- 4, 669. 141
Washoe, 1 mile north of, east of road crossing, near crossing sign, in top of iron post; red-metal disk (C. \& G. S. b. m. T T $)$ -
$4,923.845$
Washoe, 0.5 mile north of, in west end of north abutment of railroad bridge, 1 meter lower than rail, in top of stone post; bottom of square hole (C. \& G. S. b. m. U ${ }_{9}$ )
$5,025.580$
Washoe, in wing wall of first culvert north of station, cross in rock (R. S. b: m.) (C. \& G. S. b. m. Vo)
$5,038.113$
Washoe, near station platform, in west side of concrete culvert under tracks; red-metal disk (C. \& G. S. b. m. Wo)

5, 039. 763
Washoe, 3 miles south of, in line with telegraph poles, 30 meters north of road crossing, in top of iron post; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{X}_{9}$ )

5, 069. 120
Franktown, in northwest corner of foundation of railroad water tank, in top of stone post; bottom of square hole (C. \& G. S. b. $\mathrm{m} . \mathrm{Y}_{9}$ )
$5,054.084$
Franktown, 3 miles south of, opposite switch stand, at north end of switch, in line with telegraph poles, in top of iron post; red-metal disk (C. \& G. S. b. m. Z ${ }_{\mathrm{p}}$ )
$5,054.330$
Lakeview, opposite switch stand at south end of siding, 1 meter from right of way fence, in top of iron post; red-metal disk (C. \& G. S. b. m. $\mathrm{A}_{10}$ )
$5,124.865$
Carson City, 3.5 miles north of, 5 meters west of tracks on tangent of 2 per cent grade on side of a hill, on point of large boulder ; chiseled square in relief (C. \& G. S. b. m. B 10 )
$4,975.623$
Carson City, 2 miles northwest of, at north end of railroad tangent, near cross road, east of tracks; square cut in large boulder (C. \& G. S. b. m. $\mathrm{C}_{10}$ )
$4,835.512$
Carson City, 0.75 mile west of, in concrete head gates of an irrigation ditch on railroad right of way, near road crossing; red-metal disk (C. \& G. S. b. m. D ${ }_{10}$ ) $4,755.840$
Carson City, in south wall of Carson Bank near rear entrance; red-
metal disk (C. \& G. S. b. m. E $_{10}$ )
Carson City, at western entrance to Capitol, in footing of one of the supports of pillars; red-metal disk (C. \& G. S. b. m. F $\mathrm{F}_{10}$ )
$4,677.563$

Carson City, in front wall of post-office building, just over north Feet. balustrade; red-metal disk (C. \& G. S. b. m. G $\mathrm{H}_{10}$ ) 4,681. 441
Carson City, 400 meters east of station, near west end of railroad yards, on northwest end of guard wall of a timber culvert over a creek; bottom of square hole (C. \& G. S. b. m. $\mathrm{H}_{10}$ )
$4,667.874$
Carson City, about 2 miles east of, 20 meters south of railroad tracks, in center of north guard wall of highway culvert; redmetal disk (C. \& G. S. b. m. $\mathrm{I}_{10}$ )
Morgan Mills, in old stone building 10 meters south of railroad tracks, in northeast corner, marked with a horizontal slit; copper bolt (O. \& G. S. b. m. J J 10 )
$4,611.716$
Carson City, 4.5 miles east of, in north end of east abutment of highway bridge over Carson River ; copper bolt (C. \& G. S. b. m. K 10 $_{10}$ ) _ 4, 576. 129
Mound House, 2 miles west of, 0.5 mile east of section tool house, 3 meters north of tracks, in face of rock; copper bolt (C. \& G. S. b. m. $\mathrm{L}_{10}$ )

Mound House, 150 meters west of railroad station, 10 meters west of tracks, on northeast corner of a rail buried on end near a telegraph pole, rail projects 4 feet out of the ground (C. \& G. S. b. m. M $\mathrm{M}_{10}$ ) _- 4, 960. 371
Mound House, 50 meters south of station, near a telegraph pole, 75 meters east of junction of tracks of Virginia \& Truckee Ry. and Southern Pacific Ry., 1 meter lower than rail; on top of iron post; red-metal disk (C. \& G. S. b. m. N ${ }_{10}$ )

4, 935.797
Mound House, about 3.5 miles east of, near milepole 339 , 10 meters north of tracks, near telegraph pole where line crosses the tracks; on top of iron post; red-metal disk (C. \& G. S. b. m. O O ${ }_{10}$ )
$4,581.707$
Dayton, railroad water tank, on footing of northwest pillar; copper. bolt (C. \& G. S. b. m. P $\mathrm{P}_{10}$ )
$4,353.945$
Dayton, in north face of brick building used as post office; redmetal disk (C. \& G. S. b. m. Q $\mathrm{Q}_{10}$ )
$4,371.986$
Dayton, 3.25 miles east of, 3 meters east of milepole 333,10 meters south of tracks; in top of iron post; red-metal disk (C. \& G. S. b. m. $\mathbf{R}_{10}$ )
$4,350.703$
Dayton, 3.25 miles east of, 30 meters northeast of milepole 333, 5 meters north of tracks; U. S. Land Office bench mark having the following data in bronze top: $\frac{1 / 4}{\mathrm{~S} 8}\left(\right.$ (C. \& G. S. b. m. $\mathrm{S}_{10}$ )_............. 348.974

Elevations by water leveling along west shore of Pyramid Lake, by General Land Office in 1911.
T. 23 N., R. 22 E., near center of sec. 10, 4.5 miles northwest of southwest point of Pyramid Lake, 500 feet north of cabin, 200 feet east of stream, 5 feet east of road, 75 feet from lake shore, by mound of stone; iron post marked " 3889 " (No. 2)

3, 883. 794
Stake L $1310+50$, C. P. R. R. Survey, profile elevation 3902.55) _-_ 3, 906.52
The Willows, 1.5 miles northwest of, opposite red point and near point where road starts up long slope, on flint rock projecting out into water; small cross

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3,869.36
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The Willows, 1.8 miles southeast of, in SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 23 , T. 24 N., R. 21 E., 500 feet southeast of large boulder, 300 feet from lake shore, 200 feet east of road, on rocky spur; iron post marked "No. 3, 3913 "

The Willows, 4.5 miles northwest of, 1,000 feet southeast of prominent rocky point, on crest of bank 50 feet from lake shore, 0.15 mile north and 1 mile east of the meander corner of sections 28 Feet. and 33, T. 25 N., R. 21 E. ; iron post marked "No. 43883 " $3,878.381$

## ST. THOMAS QUADRANGLE.

[Latitude $36^{\circ}-37^{\circ}$; longitude $114^{\circ}-115^{\circ}$. ]
From Apex north along San Pedro, Los Angeles \& Salt Lake R. R. to Carp. (Precise leveling by U. S. Coast and Geodetic Survey.)

Apex, 400 meters southwest of signboard "Apex," at highest point of railroad grade between Las Vegas and Moapa, 4.8 meters southeast of center line of main track, 10 meters southwest of southwest end of Apex siding, in solid rock cut, 1.2 meters above top of rail; copper bolt set horizontally in cement (C. \& G. S. b. m. W) _--.-$2,474.240$
Apex, 2.4 miles northeast of, 0.4 mile northeast of milepole 354,28 meters southeast of center line of main track of railroad, in south wing wall of concrete culvert $354 \mathrm{~A}, 0.9$ meter above apron of culvert; copper bolt set vertically in cement (C. \& G. S. b. m. X)
Garnet, at southwest end of siding, 10 meters northwest of center line of main track, at northeast corner of concrete section house, facing tracks and 1.5 meters above ground; copper bolt set horizontally in cement (C. \& G. S. b. m. Y)
$2,242.216$
Garnet, on projecting concrete foundation of section house, at northeast corner, directly beneath bench mark Y ; bottom of square hole, marked " U. S. B. M." (C. \& G. S. b. m. Z)
$2,237.283$
Dry Lake, 3 miles south of, 136 feet east of center line of main track, just south of milepost 360 and bridge 359 B , in lower end of embankment for protecting railroad track from washout, projecting 1 foot above ground, on top of iron post; red-metal disk (C. \& G. S. b. $\mathrm{m}, \mathrm{A}_{1}$ )
$2,137.919$
Dry Lake, on steel base of southwest one of two water-tank supports nearest main track; chiseled square. In addition the letters "U. S. B. M." were cut in face of concrete supporting pier (C. \& G. S. b. m. B ${ }_{1}$ )
$2,093.568$
Dry Lake, 16 meters southwest of south wall of telegraph station, on opposite side of track, 16.8 meters northwest of center line of main track, in hard gypsum soil, projecting 1 foot above ground, on top of iron post; red-metal disk (C. \& G. S. b. m. C ${ }_{1}$ )

2,088. 057
Dry Lake, 2 miles northeast of, 4.5 telegraph poles south of milepole $365,60.4$ meters northwest of center line of main track, on a small knoll, on top of iron post projecting 1 foot above ground; redmetal disk (C. \& G. S. b. m. D 1 )
Crystal, 15 meters southeast of center line of main track, at northeast end of siding, in vertical wall of concrete section house, at southwest corner, on side facing tracks, 0.1 meter above ground; red-metal disk (C. \& G. S. b. m. E $\mathbf{1}_{1}$ )
Ute, 65 meters northwest of center line of main track, directly opposite signboard " Ute," in dirt embankment for wash protection, projecting 1 foot above ground, on top of iron post; red-metal disk (C. \& G. S. b. m. F ${ }_{1}$ ) 1, 932. 276

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75642^{\circ}-\text { Bull. } 654-17-5
$$

Byron, 15 meters southeast of center line of main track, in vertical wall of concrete section house, at southwest corner, on side facing the tracks, 1.4 meters above ground; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{G}_{1}$ )

Moapa, 1.2 miles southwest of, in middle of high fill across Muddy Valley, 35 meters southwest of signboard "Moapa one mile," at south corner of top surface of southeast parapet wall of culvert 381 B , northeast of main bridge over Muddy Creek; letters " U. S. B. M." cut in vertical face of wall directly benẽath bench mark ; copper bolt in cement (C. \& G. S. b. m. H $H_{1}$ )

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1,589.130
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Moapa, in front of Muddy Valley store and hotel, on west side of railroad and distant 160 meters from main track, near fence line at northeast corner of hotel, on top of iron post projecting 5 inches above ground; red-metal disk (C. \& G. S. b. m. I $\mathbf{I}_{1}$ )
$1,667.546$
Moapa, in vertical concrete foundation wall of railrad station, at northwest corner of building, facing Railroad Avenue, 0.5 meter above ground; red-metal disk (C. \& G. S. b. m. J ${ }_{1}$ )

1, 666.624
Moapa, on east side of railroad tracks; in front of store of W. C. Bowman, at northeast corner of Moapa and Railroad avenues, close to porch, on top of iron post; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{K}_{1}$ )

Moapa, 640 meters north of station, in south one of two concrete piers of water tank on west side of railroad tracks, facing the tracks, set horizontally with letters "U. S. B. M." cut in face of pier ; copper bolt set in cement (C. \& G. S. b. m. Li )

1, 686.411
Acton, at south end of siding, 20 meters east of center line of main track, set horizontally in vertical wall of section dwelling, the southerly one of two concrete buildings at Acton, midway between doors facing tracks, 1.5 meters above ground; copper bolt in cement (C. \& G. S. b. m. M ${ }_{1}$ )

1, 748.362

- Guelph, 60 feet north of signboard "Guelph," 170 feet south of center of bridge $392 \mathrm{C}, 2.5$ telegraph poles south of milepole 393,32 meters west of center line of main track of railroad, 1 meter outside right of way fence line, on top of iron post; red-metal disk (C. \& G. S. b. m. $\mathrm{N}_{1}$ )
$1,744.842$
Rox, 2.8 miles south of, 470 meters north of Huntsman's ranch, 15 meters north of first road crossing north of entrance to Meadow Valley Canyon, 3.5 meters east of center line of main track of railroad, in northeast corner of concrete culvert 394 C ; copper bolt set vertically in cement (C. \& G. S. b. m. $\mathrm{O}_{1}$ )

1, 794. 553
Rox, 15 meters east of center line of main track of railroad, on side of concrete telegraph office toward tracks, 1.5 meters above ground and 0.5 meter above top of rail ; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{P}_{1}$ )

1, 904.393
Rox, 52 meters east of center line of main track of railroad, in northwest corner of concrete support of water tank, 8 meters above railroad track on rocky ledge; copper bolt set in cement (C. \& G. S. b. m. $Q_{1}$ )
$1,932.998$
Hoya, 32 meters southeast of center line of main track, directly opposite signboard "Hoya," 0.5 meter outside the right of way fence, on opposite side of tracks from bed of Meadow Valley wash; in top of stone post, bottom of square hole (C. \& G. S. b. m. R $\mathrm{R}_{1}$ )--

[^5]Galt, 15 meters south of center line of main track, at west end of Galt siding, in side of concrete section house facing tracks, 1.7 Feet. meters above top of rail ; red-metal disk (C. \& G. S. b. m. S ${ }_{1}$ ) _-_- 2, 244. 316
Galt, 3.5 miles north of, on west end of southwest concrete abutment of bridge 41 I A, 3.5 meters northwest of center line and 0.5 meter below top of rail ; copper bolt set vertically in cement (C. \& G. S. b. $\mathrm{m} . \mathrm{T}_{1}$ )

Vigo, 36.2 meters northwest of center line of main track, directly opposite signboard "Vigo," 5.5 meters outside of right of way fence, 0.2 meter below top of rail, on top of iron post; red-metal disk (C. \& G. S. b. m. U1)
$2,433.867$
Vigo, 0.5 mile north of, on south end of west concrete abutment of bridge 413 A , in entrance to canyon north of Vigo, 3.5 meters south of center line and 0.5 meter below top of rail ; copper bolt set in cement (C. \& G. S. b. m. V ${ }_{1}$ )
Carp, 2 miles south of, 35 meters southeast of center line of main track, or southeast side of highway, 25 meters south of milepole 416, 1.1 meters below top of rail, at base of a rocky point, on top of iron post; red-metal disk (C. \& G. S. b. m. Wi)

2, 524.253
SILVER PEAK $30^{\prime}$ QUADRANGLE (LIDA $1^{\circ}$ QUADRANGLE).
[Latitude $37^{\circ} 30^{\circ}-38^{\circ}$; longitude $117^{\circ} 30^{\prime}-118^{\circ}$.]
From point 13.5 miles southeast of Columbus southeast to Silver Peak. (Primary leveling by C. R. Smith in 1897-8.)
Columbus, 13.5 miles southeast of, 20 feet southwest of road on sum-
mit, in sandstone outcrop; bronze tablet stamped " 5208 "
Columbus, $\mathbf{1 5 . 5}$ miles southeast of ; top of iron post of Salt Well guideboard

4, 929.29
Columbus, 19 miles southeast of; top of iron post of Dry Well guide-
board
Columbus, 25.5 miles southeast of, at junction with Reese River road; iron post stamped " 4996 "
$4,914.969$
Silver Peak, west end of town, in stone front of Chialdavitch store; bronze tablet stamped " 4382 "
$4,301.507$

## From Silver Peak south to Barrel Springs and return.

Silver Peak, 0.5 mile south of; top of iron post of Palmetto guide-
board
Silver Peak, 9.5 miles south of, at junction of road from Indian Garden; iron post stamped " 4803 "

4, 722.091
Barrel Springs, at right of mouth of tunnel; iron post stamped
" 6177 "
6, 096. 572
From Silver Peak west along Summit road to Fish Lake road, thence north along latter via The Crossing to Gap Springs.

Silver Peak, 6.2 miles northwest of ; top of iron post of Silver Peak mine guideboard

6, 628. 59
Silver Peak, 7 miles northwest of, on summit 50 feet south of road;
Iron post stamped " 7353 "
7, 272.193
Cave Springs, in front of right wall of cave; bronze tablet stamped Feet.
" 6248 "
Feet.
Feet. ..... 6, 166, 749
The Crossing, on Mineral Monument Hill ; iron post stamped " 4825 "- ..... 4,744.547
Gap Springs, 10 miles south of Columbus, 100 feet south of spring; iron post stamped " 4744 " ..... 4,663. 110
From The Crossing northeast via Emigrant Pass to Columbus road.Benders Emigrant Pass; iron post stamped " 6145 "6, 063.516
The Crossing, 13 miles northeast of, at junction with Columbus road; top of iron post of guideboard marked "Fish Lake Valley 13 miles " ..... $4,955.47$
From Dry Well northeast via Salt Well to Reese River road, thence south along latter to Silver Peak road.
Salt Well; iron post stamped " 4869 "4, 789.158
Big Smoky Valley, southeast side of, on Reese River road, 7.5 milesnorth of its junction with Silver Peak road; iron post stamped" 4841 "4, 761. 191
From Dry Well south to northwest corner of T. 1 S., R. 38 E. (single spur line).
T. 2 S., R. 40 E., southeast corner of sec. 8 ; iron post stamped " 4346 " 4, 265. 667From point, near The Monocline northeast to northwest corner of T. 1 S.,R. 40 E. (single spur line).
T. 1 S., R. 40 E., northwest corner of ; iron post stamped " 5453 " ..... $5,371.834$
From point near The Monocline southeast across country to southeast cornerof sec. 8, T. 2 S., R. 40 E., thence west to Silver Peak.
T. 2 S., R. 40 E., southeast corner of sec. 8; iron post stamped " 4346 "- 4, 265. 667

From fork west of Coyote Creek northeast to Blair mine and return.
Blair mine, on Mineral Ridge, 1 mile north of Tarantula Springs, on summit of trail running from Valcadis's building; iron post stamped " 7298 "

7, 216.817
From point on Piper road at northwest corner of T. 4 S., R. 39 E. west via Cow Camp Springs to southeast corner of sec. 31, T. 3 S., R. 38 E. and return.
T. 4 S., R. 39 E., northwest corner of ; iron post stamped " 4661 " $4,580.253$
T. 3 S., R. 38 E., south corner of secs. 31 and 32 ; iron post stamped
$\qquad$ 5, 897.825
STONEHOUSE QUADRANGLE,
[Latitude $40^{\circ} 30^{\prime}-41^{\circ}$; longitude $117^{\circ}-117^{\circ} 30^{\prime}$. ]
From Piute northwest along Southern Pacific R. R. to Preble. (Precise leveling by U. S. Coast and Geodetic Survey.)
Piute, at station sign, at railroad mileage $470.8,36.6$ meters south of track, 25.2 meters north of south line fence, set in cement or stone post; red-metal disk (C. \& G. S. b. m. Ne

4,505. 759
Mote, at station sign, at railroad mileage $466.3,56.2$ meters north of track, 4.9 meters south of north line fence, in cement or stone post; red-metal disk (C. \& G. S. b. m. O ${ }_{6}$ )
$4,506.533$

Valmy, on top of concrete subbase of southeastern one of four central pillars under railroad water tank; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{P}_{6}$ )

Valmy, 1.3 miles west of, 9 meters north of milepole 460,28 meters north of track, 33 meters south of north line fence, in cement or stone post ; red-metal disk (C. \& G. S. b. m. Q ${ }_{0}$ )

4, 482. 524
Stonehouse, 0.3 mile west of, on top of south head wall of concrete culvert 456 C over Humboldt River, 3.2 meters south of railroad track and 1.5 meters below it ; red-metal disk (C. \& G. S. b. m. R R $_{6}$ - $4,425.362$
Herrin, 60 meters west of east end of siding, 28 meters west of a yellow building, 1.4 meters north of a red building, 27.4 meters south of railroad track, in cement or stone post; red-metal disk (C. \& G. S. b. m. $\mathrm{S}_{8}$ ) $4,406.556$
Iron point, 100 meters east of milepole 448,18 meters west and 36 meters north of railroad station, 60 meters north of track, 0.7 meter south of north line fence, set in cement or stone post; red-metal disk (C. \& G. S. b. m. T ${ }_{6}$ )
$4,386.150$
Comus, 11.2 meters west of section tool house, $\mathbf{1 7 . 6}$ meters north of railroad track, 0.5 mile south of north line fence, in cement or stone post ; red-metal disk (C. \& G. S. b. m. U ${ }_{6}$ )

4,373. 433
Near Preble, on top surface of east abutment of railroad bridge 441 C which is bridge No. 3 over Humboldt River, 2 meters north of track; red-metal disk (C. \& G. S. b. m. V ${ }_{\mathrm{B}}$ )
$4,375.070$
TONOPAH QUADRANGLE.

## [Latitude $38^{\circ}-39^{\circ}$; longitude $117^{\circ}-118^{\circ}$. ]

From Redlich southeast along Tonopah and Goldfield R. R. to Tonopah. (Precise leveling by U. S. Coast and Geodetic Survey.)

Redlich, 30 meters east of railroad tracks, 30 meters south of section house, in rock embedded in ground; aluminum tablet stamped " 4999 U. S. G. S." (C. \& G. S. b. m. Y 12 )

4, 993.310
Redlich, 2.25 miles south of, near eleventh telegraph pole south of milepole 10, 25 meters east of Southern Pacific R. R. tracks, on top of iron post ; red-metal disk (C. \& G. S. b. m. Z $\mathrm{Z}_{12}$ )

4, 748. 629
Rockhill, in concrete foundation (no superstructure) for a water tank of the Toponah and Goldfield R. R. ; top of iron anchor bolt set in northeast footing, marked by a cross (C. \& G. S. b. m. A A $4,573.383$
Rockhill, 2.25 miles south of, 12 meters south of twelfth telegraph pole south of milepole 14, 20 meters east of Southern Pacific R. R. tracks, on top of iron post ; red-metal disk (C. \& G. S. b. m. B ${ }_{13}$ ) $4,527.950$
Coaldale, 2 miles north of, 6 telegraph poles north of milepole 18, on range with telegraph poles, 20 meters east of tracks of Tonopah and Goldfield R. R., on top of iron post; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{H}_{14}$ )
$4,530.772$
Coaldale, 1 mile southwest of, 1 mile east of Columbus Salt Marsh, west of road near crossroad; iron post stamped "U. S. G. S. 4671" (C. \& G. S. b. m. I I 1 )
$4,588.974$
Coaldale, 1 mile southeast of, 5 meters southeast of milepole 21, 20 meters north of tracks, on top of iron post ; red-metal disk (C. \& G. S. b. m. J ${ }_{14}$ )

4, 645. 296
Blair Junction, 3.3 miles northwest of, 6 meters southeast of milepole 24, 20 meters east of tracks, on top of iron post; red-metal disk (C. \& G. S. b. m. K ${ }_{14}$ )
$4,909.747$

Blair Junction, 0.3 mile northwest of, 3 meters southeast of milepole 27, 20 meters northeast of track, on top of iron post; red-metal Feet.
 tank of Tonopah and Goldfield R. R., 2 meters north of track, on top of iron post ; red-metal disk (C. \& G. S. b. m. M $\mathrm{M}_{14}$ ) $4,815.161$
Blair Junction, 2.7 miles southeast of, 6 meters southeast of milepole 30, 20 meters north of track, on top of iron post; red-metal disk (C. \& G. S. b. m. N ${ }_{14}$ )

4, 786. 106
Blair Junction, 5.7 miles southeast of, 4 meters southeast of milepole 33, 20 meters northeast of track, on top of iron post; red-metal disk (C. \& G. S. b. m, O $\mathrm{O}_{14}$ )
$4,799.528$
Blair Junction, 8.7 miles southeast of, 2 meters southeast of milepole 36, 10 meters north of track, on top of iron post; red-metal disk (C. \& G. S. b. m. P ${ }_{41}$ )
$4,742.343$
Millers, 8 miles northwest of, 10 meters southeast of milepole 39, 20 meters north of track, on top of iron post; red-metal disk (C. \& G. S. b. m. Q14)

4, 743.219
Millers, 5 miles northwest of, 25 meters southeast of milepole 42 , 20 meters north of track, on top of iron post; red-metal disk (C. \& G. S. b. m. R ${ }_{14}$ )

Millers, 2 miles northwest of, 8 meters southeast of milepole 45 , 20 meters southeast of track, on top of iron post; red-metal disk (C. \& G. S. b. m. S ${ }_{14}$ )

4, 786. 526
Millers, in front of station, in southwest footing of water tank, in top of stone post; bottom of square hole (C. \& G. S. b. m. Tit

4, 854.039
Main Line Junction, in angle of a $Y$, near a telegraph pole, 120 meters southeast of section house, on top of iron post; red-metal disk (C. \& G. S. b. m. U ${ }_{14}$ )

4,973. 658
Main Line Junction, 3.3 miles southeast of, 20 meters west of track between Main Line Junction and McSweeney Junction, just south of a sink along railroad embankment, on top of iron post; redmetal disk (C. \& G. S. b. m. V ${ }_{14}$ )
$5,153.566$
McSweeney Junction, in the $Y$ and about 100 meters north of junction of tracks, on top of iron post; red-metal disk (C. \& G. S. b. m. $\mathrm{W}_{14}$ )
$5,293.992$
Columbia Junction, 2.5 miles south of, 15 meters south of a road crossing track, 20 meters west of track, in line with telegraph poles, on top of iron post; red-metal disk (C. \& G. S. b. m. X $\mathbf{X}_{14}$ )_-_ 5, 363. 352
Columbia Junction, 30 meters north of track, near telephone booth, in line with telegraph poles, on top of iron post; red-metal disk (C. \& G. S. b. m. $\mathrm{Y}_{14}$ )
$5,538.184$
Columbia Junction, 0.6 mile east of, 8 meters south of track, 0.25 mile west of large mine hoist, in end of boulder 2 feet by 1.5 feet, about 1 foot above the surface of ground, in top of stone post; bottom of square hole (C. \& G. S. b. m. Z Z $\mathbf{Z}_{4}$ )

5, 619. 661
Tonopah, in west face of Tonopah Banking Corporation's building on Main Street; iron post stamped " U. S. G. S. B. M." (C. \& G. S. b. $\mathrm{m} . \mathrm{A}_{15}$ )

6, 026. 494
Tonopah, 1 mile south of railroad station, 800 meters southeast of baseball field, 20 meters west of road to Goldfield; iron post stamped " U. S. G. S. B. M." (C. \& G. S. b. m. Bis)

6, 147. 970

McSweeney Junction, 3.5 miles south of, 5 meters south of milepole 61, 20 meters west of track, on top of iron post; red-metal disk (C. \& G. S. b. m. C 15 )

Feet.

From point near Gold Mountain Mining Co.'s plant north to Tonopah. (Primary leveling by Ress Philips in 1905.)
Tonopah, 3 miles south of, at foot of hill, 20 feet south of road, 0.5 mile south of New England mine; iron post stamped " 7 "

Tonopah, at entrance to Nye \& Omsby Co.'s bank; cross cut in curbstone (railroad elevation 6,085.785 feet)
$6,024.77$
From Tonopah west along wagon road to Montezuma Wells, thence north to San Antonio. (Primary leveling by T. A. Green in 1907.)
Tonopah, in front of station; top of rail
$5,975,8$
Tonopah, 5.8 miles west of, 30 feet south of road; iron post stamped "5337 1907"
$5,330.628$
Tonopah, 11.9 miles west of, 0.7 mile east of Montezuma Wells, 30 feet north of road at junction with road running southeast toward railroad; iron post stamped " 48451907 "
$4,837.219$
Montezuma Wells, 5.3 miles north of, 30 feet west of road; iron post stamped " 48901907 " $4,883.273$
Midway, on east side of road, at southwest corner of house occupied by Peter Samuelson; iron post stamped " 50081907 "
$5,001.502$
Midway, 5 miles northeast of, east side of road; iron post stamped " 5140 1907"
$5,133.525$
San Antonio, 0.6 mile west of, 20 feet south of road; iron post stamped
" 5384 1907"
San Antonio, 40 feet southeast of corner of main building, in southeast corner of fence around house; iron post stamped " 54061907 "- 5, 399. 735

## From San Antonio west via Cloverdale and Cipac mine to Battle's Well.

Cloverdale, 12 miles southeast of, 30 feet south of road; iron post stamped " 53761907 "
$5,369.154$
Cloverdale, 6 miles southeast of, 30 feet south of road, 0.8 mile west of road running southeast to Tonopah; iron post stamped " 5508 1907"
$5,501.441$
Cloverdale, forks of road south of, in prong of forks forming $Y$; iron post stamped " 56971907 "
$5,690.103$
Lower Black Spring, 3.2 miles east of, 3.8 miles west of Cloverdale, 30 feet north of road; iron post stamped " 54391907 "
$5,432.772$
Cipac mine, 4 miles southwest of, 10 feet south of road; iron post stamped " 57731907 "

5, 766. 080
Cipac mine, 9.2 miles west of, 30 feet south of road, 120 feet west of forks, in large outcrop of limestone rock; aluminum tablet stamped " 66721907 "

6, 665.928
Cipac mine, 15.2 miles west of, 10 feet north of road, on little hill between two drains; iron post stamped " 62461907 "

6,239. 525
Battle's Well, 783 feet east of, 590 feet west of main forks, 25 feet south of road, in large oblong boulder; aluminum tablet stamped "6240 1907"

6, 233.446
From San Antonio northeast along wagon road to point 2 miles west of Central.
San Antonio, 6 miles northeast of, on east side of road; iron post stamped " 58871907 "
San Antonio, 10 miles northeast of, 2 miles west of Central, at forks of road, 30 feet north of junction; iron post stamped " 62261907 "- 6, 219.180

## From point near Central east to Manhattan and return.

Manhattan, west end of town, on south side of road, 115 feet east of Feet. cabin occupied by E. E. Teberg; iron post stamped " 6905 1907"
Manhattan, southeast corner of barber shop managed by Bruce Wood; iron post stamped " 70211907 "

7, 014.205
From point near Central north along wagon road to Ophir Canyon, thence west over Ophir Summit to Keough's ranch, thence southwest via Union Canyon and Berlin to Goldyke, thence south and southeast to point near Cloverdale.

Central, 7.6 miles northwest of, 20 feet east of road; iron post stamped " 5742 1907"

5, 734.915
Central, 13.8 miles northwest of, 20 feet east of road, 40 feet south of four corners; iron post stamped " 5801 1907"
$5,794.766$
Wood's ranch, 200 feet northwest of ranch house, on east side of road; iron post stamped " 56401907 "
$5,632.813$
Darroughs Hot Springs, 400 feet west of house occupied by James Darrough, east side of road, in southwest corner of fence at mail box; iron post stamped " 56091907 "
$5,602.186$
Hot Springs, 6 miles northwest of, on west side of road, 10 feet south of second-class crossroads, in rock; aluminum tablet stamped " 5830 1907 "
$5,823.145$
Ophir Canyon, mouth of, north side of trail, 200 feet south of stream, in flat granite rock 4 feet long and 5 feet wide; aluminum tablet stamped " 62821907 "

6, 275. 059
Ophir Summit, 15 feet south of trail, on east side of divide, 35 feet north of large pile of rock; aluminum tablet stamped " 10115 1907"
$10,108.498$
Gooding's ranch, 600 feet north of house occupied by George Gooding, north side of wagon road; iron post stamped " 74301907 "
$7,423,423$
Keough's ranch, southwest corner of fence around house occupied by George Keough; iron post stamped " 67261907 "
$6,719.637$
Keough's ranch, 6 miles southwest of, summit at head of Union Canyon, 50 feet north of wagon road, 75 feet northeast of divide, in rock; aluminum tablet stamped " 79761907 "

7,969. 433
Union Canyon, at forks near mouth of, 40 feet north of junction, in rock; aluminum tablet stamped " 67631907 "
$6,756.445$
Berlin, 20 feet east of southwest corner of post office and The Nevada Co.'s store, on south side; iron post stamped " 66831907 " 6,676. 496
Berlin, 5.8 miles southwest of, 10 feet north of road; iron post stamped " 6131 1907"
$6,124.525$
Berlin, 12 miles southwest of, on north side of road, on east side of draw, 50 feet north of where road starts down into draw; iron post stamped " 6119 1907"
$6,112.602$
Berlin, 17.9 miles southwest of, 20 feet south of road, on west side of small draw ; iron post stamped " 64691907 "
$6,462.423$
Goldyke, north side of store kept by W. Dee Jones, 20 feet west of northeast corner ; iron post stamped " 58861907 "
$5,879.473$
Pactolus, 0.4 mile north of, forks at signboard reading "Sodaville 35 miles," 30 feet east of junction; iron pest stamped " 57961907 "- 5, 788. 990
Pactolus, 5.7 miles southeast of, 25 feet west of road; iron post stamped " 59301907 "

5, 923.324
Black Springs, on west side of road at upper spring, in southeast corner of pasture fence ; 'ron post stomped " 55701907 "
$5,563.524$

## From Redlich south to Columbus.

Redlich, 90 feet east of tracks, 300 feet north of milepost, 7,100 feet
south of section house and post office, in rock embedded in ground;

Redlich, 5.1 miles south of, at junction with road running northwest, at signboard reading "Sodaville 17 miles," 40 feet east of road; iron post stamped " 48281907 "

Feet. $4,993.310$
$4,821.586$
From Columbus southeast across Salt Marsh.
Coaldale, 1 mile southwest of, 1 mile east of Columbus Salt Marsh, west of road near crossroads ; iron post stamped " 4671 " (old railroad datum)
$4,588.974$
From Goldyke northwest to point 2 miles west of Kelly's Well. (Primary leveling by Ress Philips in 1905.)

Goldyke, 2.4 miles northwest of, 0.6 mile east of Everett's mine, 20 feet north of road, 100 feet west of road running south, at prospect hole, in rock; aluminum tablet stamped " 5780 "

5, 773.218
Kelly's Well, 3.5 miles southeast of, 75 feet west of road, at point projecting west between two drains, in porphyry outcrop; aluminum tablet stamped " 5258 "

5, 251.505
Kelly's Well, southeast corner of windmill, in plank; nail marked " 4577 "
$4,570.45$
WABUSKA QUADRANGLE (includes part of Yerington special quadrangle).
[Latitude $39^{\circ}-39^{\circ} 30^{\prime}$; longitude $119^{\circ}-119^{\circ} 30^{\prime}$.]
From Dayton southeast along Southern Pacific R. R. to point near Schurz. (Precise leveling by U. S. Coast and Geodetic Survey.)

Dayton, 6.25 miles east of, 20 meters west of milepole 329,8 meters south of railroad track, on top of iron post; red-metal disk (C. \& G. S. b. m. T10)

Clifton, 1 mile west of, 2 telegraph poles east of milepole 326 and 10 meters south of railroad track, on top of iron post; red-metal disk (C. \& G. S. b. m. U ${ }_{10}$ )

4, 273. 882
Clifton, 2 miles east of, 40 meters west of and on opposite side of track from milepole 323,3 meters north of railroad track, opposite a point of curvature, on top of iron post; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{V}_{10}$ )
$4,252.626$
Clifton, 5 miles east of, 2 meters west of milepole 320,10 meters south of railroad track, on top of stone post; red-metal disk (G. \& G. S. b. m. $W_{10}$ )

4,239. 070
Churchill, 1 mile west of, 2 telegraph poles and 12 meters east of milepole 317, 4 meters south of railroad track, 10 meters south of Carson River, on top of iron post; red-metal disk (C. \& G. S. b. m. X $\mathrm{X}_{10}$ )
Churchill, 0.5 mile north of, in west end of north abutment of concrete railroad culvert 315 D ; top of iron bolt, marked "B. M. 52 " (C. \& G. S. b. m. $\mathrm{Y}_{10}$ )
$4,207.810$
Churchill, 0.5 mile north of, in west end of south abutment of concrete railroad culvert 315 D ; red-metal disk (C. \& G. S. b. m. $\mathrm{Z}_{10}$ ) __ 4, 209. 890
Churchill, in southwest footing of railroad oil tank, in top of stone post ; bottom of square hole (C. \& G. S. b. m. A A1)

4,213. 938

Churchill, 2.5 miles south of, 0.5 mile north of milepole 319,1 meter higher than track, in line with telegraph poles near north end of long tangent, on top of iron post ; red-metal disk (C. \& G. S. b. m. B B $_{11}$ ) - 4, 291. 156
Churchill, 5 miles south of, 2 meters south of milepole 322 , in line with telegraph poles, 8 meters west of track, on top of iron post; red-metal disk (C. \& G. S. b. m. C Cin )
$4,274.539$
Wabuska, 3 miles northwest of, 3 meters north of milepole 325,8 meters west of track, on top of iron post; red-metal disk (C. \& G. S. b. $\mathrm{m} . \mathrm{D}_{11}$ )
$4,293.919$
Wabuska, 2 feet west of station, 5 feet north of southwest corner; iron post stamped " 4297 Wab." (U. S. G. S.) (C. \& G. S. b. m. E E 11 ) - 4, 298.981
Wabuska, 200 feet west of station, in front of water tank; top of south rail (U. S. G. S.)
$4,300.09$
Wabuska, 800 feet south of station, 20 feet west of road to Yerington, near sod house; iron post stamped " 4303.95 SP" (U. S. Reclamation Service b. m.) (U. S. G. S.) (C. \& G. S. b. m. F $\mathrm{F}_{11}$ )
$4,299.145$
Wabuska, about 4 miles southeast of, 2 meters north of milepole 332 , 8 meters west of railroad track, on top of iron post; red-metal disk (C. \& G. S. b. m. G ${ }_{11}$ )
$4,308.226$
Wabuska, 9 miles east of, 15 meters west of track, abreast of milepole 337, on top of iron post; red-metal disk (C. \& G. S. b. m. H $\mathrm{H}_{11}$ )
Wabuska, 11 miles east of. 10 meters west of track, abreast of third telegraph pole east of milepole 339, in a dry lake bed, on top of iron post; red-metal disk (C. \& G. S. b. m. I ${ }_{11}$ )

4, 274.125
Wabuska, 14.5 miles southeast of, 3 telegraph poles northwest of "One mile to Rio Vista station" sign, 20 meters west of track, on top of iron post; red-metal disk (C. \& G. S. b. m. Ji1)
$4,295.185$
Schurz, 8 miles north of, 20 meters south of track, abreast of milepole 346, on top of iron post ; red-metal disk (C. \& G. S. b. m. K ${ }_{11}$ )
$4,370.254$
From Wabuska south along highway to point near Yerington station. (Leveled twice by R. H. Chapman in 1913.)

Wabuska, 200 feet west of station, in front of water tank; top of south rail of Southern Pacific R. R
$4,300.09$
Wabuska, 2 feet west of station, 5 feet north of southwest corner; iron post stamped " 4297 Wab "

14,298.981
Wabuska, 800 feet south of station, 20 feet west of road to Yerington, near sod house; iron post stamped " 4303.9 SP" (U. S. Reclamation Service b. m.)
${ }^{1} 4,299.145$
Wabuska, 1.6 miles south of, west side of road, 350 feet south of S. Penrose's house ; iron post stamped " 4305 Wab "
$4,306.986$
Wabuska, 3.1 miles south of, in front of Warren Brothers' home ranch, 250 feet south of road to east, on west side of road, in root of cottonwood tree; copper nail $4,323.10$
Wabuska, 4 miles south of, 650 feet north of Oakey's house, on east side of road, in root of cottonwood tree; copper nail
$4,329.73$
Wabuska, 4.8 miles south of, 2,000 feet north of east-west crossroad, due west of Mason Butte, on west side of road; iron post stamped " 4334 Wab"
$4,335.579$
Wabuska, 6.3 miles south of, 1,200 feet north of Pat Gallagher's home ranch, on east side of road, in root of cottonwood tree; copper nail
$4,345.12$

[^6]Wabuska, 6.5 miles south of, in front of Pat Gallagher's home ranch, on west side of road; iron post stamped " 4353 S . P." (U. S. Reclamation Service b. m.)
Wabuska, $\mathbf{7 . 5}$ miles south of, 1,350 feet north of McGowan's ranch house (empty), on west side of road, in top of stub to telephone pole; copper nail
Wabuska, 7.8 miles south of, opposite McGowan's ranch house (empty), 30 feet north of ditch, west side of road; iron post stamped " 4359 Wab"
Wabuska, 8.2 miles south of, 2,100 feet south of McGowan's ranch house, south of crossroads, west of main road, in stub to telephone pole, 3 feet above ground; copper nail $4,361.68$
Wabuska, 8.8 miles south of, 0.5 mile northwest of McCloud Hill, west side of road, in stub to telephone pole, 3 feet above ground; copper nail
$4,370.84$
Wabuska, 9.3 miles south of, 2 miles north of Yerington station, 300 feet south of signpost at fork of roads to Buckskin and Morning Star, 50 feet east of road; iron post stamped " 4404 Wab "...

4, 405. 905

WADSWORTH QUADRANGLE.

## [Latitude $39^{\circ} 30^{\circ}-40^{\circ}$; longitude $119^{\circ}-119^{\circ} 30^{\circ}$. ]

From Hazen west along Southern Pacific R. R. to Thisbe. (Precise leveling by U. S. Coast and Geodetic Survey.)

Hazen, 100 meters east of east end of siding, on top surface of east abutment of railroad bridge 289 A ; top of roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. K ${ }_{8}$ )

4, 005. 596
Hazen, 0.3 mile east of station, in southeast concrete pillar under water tank, 50 meters north of track; red-metal disk (C. \& G. S. b. m. Ls)
$4,003.345$
Patna, at railroad mileage 284.7 , 0.1 mile west of section foreman's house, on top of west concrete abutment of small railroad bridge 284 B ; red-metal disk (C. \& G. S. b. m. Ms)

4, 061.632
Patna, 1.1 miles west of, at railroad mileage 282.8, in top surface of west abutment of small bridge 282 C ; top of roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. Ns)

4, 077.676
Argo, 0.5 mile east of, at railroad mileage 281.4, in east concrete abutment to bridge 281 B ; top of a roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. $\mathrm{O}_{\mathrm{s}}$ )

Argo, 0.1 mile east of station sign, at railroad mileage $280.5,11.3$ meters east of derailing switch, 30.7 meters north of track, 0.4 meter south of north line fence; set in cement or stone post; redmetal disk (C. \& G. S. b. m. Ps)

4, 073. 830
Luva, at railroad mileage $277.8,4$ meters east of station sign, 29.5 meters north of track, 1 meter south of north line fence, 16 meters west of point of branch line, set in cement or stone post; redmetal disk (C. \& G. S. b. m. Qs)
$4,127.521$
Fernley, at railroad mileage 276.1, 16 meters west of railroad station, 59 meters north of track, 0.8 meter south of north line fence; red-metal disk set in cement or stone post (C. \& G. S. b. m. Rs) _-_ 4, 150. 661
Note.-The station is soon to be moved about 0.3 mile west.

Fernley, 200 meters west of station, 60 meters west of milepost 276 , 3 meters south of track, on the south head wall of concrete culvert (U. S. G. L. O.), aluminum tablet (not stamped) (C. \& G. S. b. $\mathrm{m} . \mathrm{S}_{8}$ )

Feet.

Note.-The station is soon to be moved about 0.3 mile west.
Gilpin, 150 meters west of water tank, 200 meters east of station sign, 15.7 meters south of track, set in cement or stone post; redmetal disk (C. \& G. S. b. m. T ${ }_{8}$ )
Derby, at railroad mileage 269.5 , in top surface of west abutment of bridge 13 over Truckee River; top of roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. Us)

4, 161. 258
Derby, 0.6 mile west of, at railroad mileage 268.7, in top surface of east abutment of bridge 12 over Truckee River; top of roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. V8) 4, 159. 956
Derby, 1 mile west of, at railroad mileage 268.2 , in top surface of east abutment of bridge 11 over Truckee River; top of roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. Ws) $4,166.229$
Thisbe, at railroad mileage $264.7,0.2$ mile west of Derby Dam of U. S. Reclamation Service, in top surface of east concrete abutment of bridge 10 over Truckee River, which flows under bridge from north to south; top of roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. X ${ }_{8}$ )

4, 219. 909
Thisbe, 0.5 mile west of Derby Dam of U. S. Reclamation Service, at railroad mileage 264.5 , in top surface of east abutment of bridge 9 over Truckee River, which flows under bridge from south to north; top of roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. $\mathrm{Y}_{8}$ )
$4,223.820$
From Fernley north along highway to Pyramid Lake Indian Reservation agency, thence west to Pyramid Lake. (Primary leveling by General Land Office, 1911-12.)
Fernley station, opposite semaphore, on main track of Southern Pacific R. R.; top of north rail (railroad elevation top of rail, 4,158.667)
$4,153.8$
Fernley station, 700 feet west of, 10 feet, south of Southern Pacific R. R. main track, in south head wall of concrete culvert 277 A ; bronze tablet (G. L. O. b. m.) (C. \& G. S. b. m. S s )
$4,152.990$
Note.-Station soon to be moved 0.3 mile west.
Wadsworth, 1 mile southeast of (Fernley road) ; top of post. (U. S. R. S. b. m. marked "4099.0 S. P.)

4,094. 472
Wadsworth, on south end of west abutment of old bridge; chiseled square (R. R. b. m.)

4, 073.53

Wadsworth, 1.5 miles northwest of, in fork of roads, in NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 32, T. 21 N., R. 24 E., iron post marked " 4215.744 " $\qquad$ 4, 211. 211
Note.-Line was begun at this bench mark, which was established by the U. S. Reclamation Service in 1904.
Wadsworth, 1.8 miles west of, closing corner of Tps. 20 and 21 N., R. 24 E., on west boundary of Pyramid Lake Indian Reservation; iron post ( 3 -inch post) marked " 4202 "
$4,196.977$
T. 21 N., R. 24 E., closing corner sec. $31,1 / 16$ section corner (south half), on west boundary of Pyramid Lake Indian Reservation; top of iron post
$4,198.59$
Milepost 137 1/2, Pyramid Lake Indian Reservation; top of iron post_ 4, 201.28
Closing corner sec. $31,1 / 16$ section corner (middle line), on west ..... Feet.
boundary of Pyramid Lake Indian Reservation; top of iron post_ ..... 4, 201.92
Milepost 137, Pyramid Lake Indian Reservation; top of post ..... $4,199.21$
T. 21 N., R. 24 E., closing corner of secs. 30 and 31, Pyramid Lake Indian Reservation; top of iron post ..... $4,198.94$
T. 21 N., R. 24 E., closing corner sec. 30, 1/16 section corner (south half), Pyramid Lake Indian Reservation; top of iron post ..... $4,198.94$
T. 21 N., R. 24 E., closing corner sec. 30 , $\mathbf{1 / 1 6}$ section corner (middle line), Pyramid Lake Indian Reservation; top of iron post ..... $4,190.93$
Milepost 136, Pyramid Lake Indian Reservation, T. 21 N., R. 24 E.; top of iron post ..... $4,187.48$
T. 21 N., R. 24 E., closing corner secs. 19 and 30, at Pyramid Lake Indian Reservation; top of iron post ..... $4,181.24$
T. 21 N., R. 24 E., Pyramid Lake Indian Reservation, closing corner sec. 19, 1/16 section corner (south half); top of iron post ..... $4,180.42$
Wadsworth, 4 miles northwest of, closing corner of T. 21 N., Rs. 23and 24 E., on west boundary of Pyramid Lake Indian Reservation;iron post marked " 4185 "$4,180.204$
T. 21 N., R. 23 E., Pyramid Lake Indian Reservation, milepost 134 ; top of iron post ..... $4,222.26$
T. 21 N., R. 23 E., Pyramid Lake Indian Reservation, milepost 133 $1 / 2$; top of iron post ..... 4, 302.99
T. 21 N., R. 23 E., closing corner sec. 12, $1 / 16$ section corner (south half) ; top of iron post ..... $4,327.97$
Wadsworth, 7 miles northwest of, in fork of roads, on main road to reservation agency, in NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 6, T. 21 N., R. 24 E.; iron post (U. S. R. S. b. m.) marked " 4230.819 " ..... $4,226.145$
Station K $21+218$, on Southern Pacific R. R.; hub (location sur-vey)4, 177. 72
Station L 602, on Southern Pacific R. R., 33 feet north of station; hub (location survey) ..... $4,171.06$T. 23 N., R. 23 E., in NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 25 , at reservation agency, atsouthwest corner of agency office building; iron post, marked" 3908.870"3, 904.148
Note.-Line was begun at this bench mark, which was estab-lished by the U. S. Reclamation Service in 1904.
Gale, near, ditch survey; peg marked " 3884.30 "3, 879.66
Duck Lake, water level, July 2, 1911 ..... $3,867.3$
T. 23 N., R. 23 E., meander corner secs. 20 and 21, north bank Duck Lake; top of post ..... $3,872.84$
Pyramid Lake, near southwest corner, 250 feet from shore, in fork of roads ; top of iron post stamped "B. M. No. 1, 3887 " ..... 3, 882.258
T. 23 N., R. 23 E., quarter section corner of secs. 29 and 30 ..... 3, 939.34
Station L $1073+37.6$, Southern Pacific R. R. location survey; hub (railroad elevation " 3963.5 ") ..... 3, 959.07
No. L 1069.162 of Southern Pacific R. R. (railroad gives elevation" 3978.5 ")$3,974.20$
From the agency north along highway to Winnemucca Lake, and by water levels along west shore 5 miles.
T. 23 N., R. 23 E., sixteenth section corner of secs. 23 and 24 (south half) ; top of iron post$3,865.75$
T. 23 N., R. 23 E., quarter section corner of secs. 13 and 14 ; top ofiron post3, 960.36
Milepost 23, Pyramid Lake Indian Reservation; top of iron post ..... 3, 903.44
T. 23 N., R. 23 E., SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 12, on east boundary of reservation, 10 feet N ., $20^{\circ} \mathrm{W}$. of milepost 23 ; iron post, originally Feet. stamped " 3913 " (probably now stamped " 3908 ") 3, 903. 544
Winnemucca Lake, at Peacock's ranch; water level, July 11, 1911_._ 3, 852.56
Winnemucca Slough, 50 feet west of, near head of Winnemucca Lake, at Peacock's ranch, 100 feet east of house, 12 feet east of barn; iron post marked " 3870 "
3. 861.317
T. 24 N., R. $23^{\circ} \mathrm{E}$., N. $\frac{1}{2} \mathrm{sec} .3$, about 24 chains south and 4 chains west of meander corner between secs. 3 and 34,300 feet west of lake, 10 feet east of road; 3 -inch iron post with brass cap marked " 3887 "- 3, 878. 680

## WEILAND QUADRANGLE.

$$
\text { [Latitude } 41^{\circ}-41^{\circ} 30^{\prime} \text {; longitude } 115^{\circ} 30^{\circ}-116^{\circ} \text {.] }
$$

From point 13.6 miles northwest of Elko north to point near Weiland. (Single spur line by General Land Office, 1911-12; elevations unroliable.)

Elko, $\mathbf{1 4 . 5}$ miles north of, 125 feet west of barn at stage station, 75 feet to left of Elko-Tuscarora road, near telephone pole; standard bench-mark post marked " 6179 "
$6,180.249$
Elko, $\mathbf{1 6 . 2 2}$ miles north of, 10 feet to right of Elko-Tuscarora road, in 2-inch stake; nail

6, 116. 78
Elko, 16.9 miles north of, 8 feet to right of road, in 2-inch stake; nail_ 6, 086. 22
Elko, 17.34 miles north of, at top of hill before entering creek bottom,
20 feet left of Elko-Tuscarora road; standard bench-mark post marked "6072"

6, 072.718
Elko, 17.97 miles north of, 15 feet to left of road, near old wagon; on stake.

6, 046.09
Elko, 19.6 miles north of, 30 feet to left of Elko-Tuscarora road, on top of hill; stake
$6,038.77$
Elko, 20.9 miles north of, 110 feet to left of Elko-Tuscarora road, near blazed telephone pole, in 2 -inch stake; nail
$5,974.94$
Elko, 22.2 miles north of, 200 feet south of Parks's ranch house, in southwest corner of tank, on rock; cross

5, 958.16
Elko, 22.6 miles north of, $\frac{1}{2}$ mile north of Parks's ranch, 200 feet south of foot of hill where Gold Creek Road leaves Tuscarora Road, near fence corner, 60 feet east of Elko-Tuscarora road, in 2-inch stake; nail

5, 930.22
WELLINGTON QUADRANGLE (including part of Yerington special quadrangle).
[Latitude $38^{\circ} 30^{\prime}-39^{\circ}$; longitude $119^{\circ}-11.9^{\circ} 30^{\prime}$.]
From point near Yerington station south along highway to Tedder's Bee ranch.
(Primary line leveled twice by R. H. Chapman in 1913.)
Yerington station, 0.9 mile north of, east of road, south of lane to Yerington, in fence corner, in stub to telephone pole, 2 feet above ground; copper nail
$4,388.22$
Yerington station, 150 feet northeast of, 100 feet east of freight house ; iron post stamped " 4405 Wab "
$4,406.960$
Yerington, in front of station, main-line track; top of east rail_-_- 4, 408.8
Yerington station, 0.5 mile south of, just north of milepost 12, in east end of railroad tie, at Bluestone road crossing ; copper nail__ 4, 405.99
Yerington station, 1.1 miles south of, west side of road; copper nail in peg, marked "T. B. M." on small granite boulder
$4,414.04$

Mason, at southwest corner of Bridge Street and Mason Avenue, 6 inches from east wall of Mason Hotel, in sidewalk; bronze Feet tablet stamped " 4420 Wab " 4, 422. 390
Mason, northeast corner of old public-school house, east of railroad; ground ( 2 feet below top of foundation)
$4,426.0$
Mason, west end of bridge over Walker River, top of guard timber, 13.25 feet above zero of gage on piling, north side of bridge, north side of roadway ; copper nail
$4,406.81$
Water level, under above-described bridge, August 23, 1913, 10.30 a. $m$

4, 397.6
Mason, 0.4 mile south of, just north of Moore ranch house, east of road, north of old ditch, in root of cottonwood tree; copper nail_-_ 4, 415. 65
Mason, 0.9 mile south of, 250 feet east of railroad, at corner of main road turning west across railroad; iron post stamped " 4420 Wab "- 4, 421.925
Mason, 1 mile south of, 400 feet north of milepost 15 , north side of railroad crossing, east end of tie ; copper nail
$4,428.64$
Mason, 1.7 miles south of, 350 feet north of culvert, at point where right of way fence crosses track, in west end of railroad tie; copper nail
$4,428.92$
Mason, 2.1 miles south of, lane crossing railroad to east, in stub of fence-corner post; copper nail
$4,438.41$
Mason, 2.4 miles south of, 1,000 feet southeast of Tedder's Bee ranch, 1.5 miles north of Nordyke, west side of road; iron post stamped " 4439 " Wab"

4,441. 065
From Yerington station east along highway to Yerington (leveled twice).
Yerington station, 0.3 mile east of, east end of north truss of bridge over Walker River ; copper nail

4, 391.33
Walker River, under truss bridge; surface of water, August 11, 1913_ 4, 381.1
Yerington station, 1.4 miles east of, southeast corner of Main and Bridge streets in Yerington, 12 feet southwest of city water hydrant, 75 feet northwest of Daniels \& Rogers livery stable, streets intersect at corner of secs. 14, 15, 22, and 23, T. 13 N., R. 25 E . ; iron post stamped " 4382 Wab "
$4,384.313$
Yerington, Lyon County courthouse; top of step immediately above following described bench mark
$4,384.28$
Yerington, in vertical face near south end of lower step of Lyon County courthouse; bronze tablet stamped " 4382 Wab"
$4,384.047$
From Yerington station west along highway to Mickey Pass (leveled twice).
Yerington station, 0.6 mile west of, 100 feet west of road fork, in peg at signboard " Reno-Yerington" ; copper nail
$4,491.67$
Yerington station, 0.5 mile west of, on top of post west stay to frame of Nevada Empire shaft, 2 feet above ground; copper nail
$4,487.28$
Yerington station, 1 mile west of, 5 feet south of post marked "NW. cor. of Gray Eagle No. 1," on top of claim post; copper nail
$4,591.78$
Yerington station, 1.2 miles west of, 20 feet south of road, on top of pyramid boulder embedded in gravel wash
$4,642.68$
Yerington station, 1.6 miles west of, 140 feet northwest of post marked "SW. cor. Down No. 1," and 5 feet south of road; iron post stamped " 4735 Wab "

4, 737.315
Yerington station, 1.7 miles west of, 10 feet north of road, in top of white stake with black band marked "N. S. Center Brownie No. $5 "$; copper nail

Yerington station, 1.9 miles west of, 500 feet west of pink hill, 100 feet south of end of pink ridge, in forks of road south to quarry, Feet. on hub of pink rock 4, 846. 41
Yerington station, 2.2 miles west of, 500 yards east of power line at foot of red hill, 30 feet south of road, in wash, on top of pinkboulder, marked "B. M."
Yerington station, 2.6 miles west of, 25 feet south of and 5 feet above road; on big gray boulder

5, 104. 20
Yerington station, 2.8 miles west of, at entrance to "The Canyon," 8 feet above road; on shoulder of solid rock $5,188,28$
Yerington station, 2.9 miles west of, 135 feet east of mouth of north tunnel of Rocky Mountain King mine, just south of road; on shoulder of blue boulder
Yerington station, 3.2 miles west of, 100 feet west of steep ditch, north edge of road; on granite slab
Yerington station, 3.5 miles west of, 5 feet southeast of corner marked by large stone in forks of wash; on sharp rock
$5,589.36$
Yerington station, 3.9 miles west of, 15 feet north of road, 4 feet south of small cairn, on top of iron-stained rock
Yerington station, 4 miles west of, 5 feet north of road, at highest point in Mickey Pass ; iron post stamped " 5866 Wab "

5,868. 331
From Mickey Pass southwest along highway to Ludwig (single-spur line closing upon railroad levels).

Yerington station, 4.6 miles west of, 460 feet east of "Honest Endeavor" shaft, south edge of road; on pink boulder5, 628.74
Yerington station, 5 miles west of, 40 feet north of road, on top of post supporting sign "Honest Endeavor Mining Co."
Ludwig, 1.8 miles north of, 20 feet west of road, southeast corner of collar of shaft of Nevada Queen Copper Co.; copper nail
$5,401.73$
Ludwig, 1.5 miles north of, 0.25 mile east of black paper covered houses of Nevada Queen Copper Co., 150 feet south of crossroads, 20 feet east of road, on granite boulder
Ludwig, 1.1 miles north of, 100 feet east of small drain from north, 10 feet south of road, on small boulder in wash

5, 376. 31
Ludwig, 1 mile north of, 100 feet south of and 20 feet below claim post marked "SW. cor. Dan Durand," south edge of road; on white rock

5, 297. 20
Crossing of road and railroad just north of Ludwig incline shaft_- 5, 181. 2
Ludwig, 2 feet north of north wall and 11 feet east of northwest corner of station; iron post stamped " 5122 "

5, 124. 414
Ludwig, in front of station, on heavy grade; top of rail_ 5, 124.
Ludwig, 1,575 feet north of station, 50 feet east of track, 175 feet north of Dr. L. M. Cramer's house, 350 feet south of incline shaft of Ludwig Mine; peg (N. C. B. R. R. b. m.)
Note.-The following bench marks established by the U. S. Reclamation Service are reduced to 1912 adjustment and partly checked by railroad levels.
Wilson's, at forks of main road and private road to M. Wilson's house, just east of mouth of canyon of West Fork of Walker River ; iron post stamped " 4528.2 SP."
$4,523.47$
Hudson, in sec. 3, T. 11 N., R. 24 E., northwest of cross roads, on road to Wellington, at fork of road to north (to Ludwig) west of railroad track; iron post stamped " 4726.2 SP."
$4,721.47$

## WHITE MOUNTAIN QUADRANGLE.

## [Latitude $37^{\circ} 30^{\prime}-38^{\circ}$; longitude $118^{\circ}-118^{\circ} 30^{\prime}$. ]

From Sunland southwest along Southern Pacific R. R. to California-Nevada State line. (Precise leveling by U. S. Coast and Geodetic Survey.)

Sunland, 3.5 miles southwest of, one telegraph pole and 30 meters west of milepost 462, 6 meters north of track, on top of iron post; red-metal disk (C. \& G. S. b. m. $\mathrm{O}_{13}$ )

Feet. 6,698. 976
Sunland, 5.5 miles southwest of, 0.11 mile north of Nichols, 235 feet west of milepost 464,42 feet west of railroad track, 36 feet northwest of culvert sign 464 A , on bank of small drain, cemented in large boulder; bronze tablet stamped " 6471 U. S. G. S." (C. \& G. S. b. m. $\mathrm{P}_{18}$ )

6, 463. 432
Queen, in section foreman's yard, 28 feet east of old house, 26 feet west of railroad track, under large cottonwood tree; iron post stamped " 6179 U. S. G. S." (C. \& G. S. b. m. Q ${ }_{13}$ )

6, 171. 763
Queen, 2 miles west of, on State line monument, in south side of footing; in top of stone post, bottom of square hole (C. \& G. S. b. $\mathrm{m} . \mathrm{R}_{18}$ )

5, 978.374
Queen, 2.35 miles southwest of, 0.35 mile southwest of Von Schmidt monument, 75 feet west of railroad, 5 feet west of rock cairn on U. S. C. \& G. S. State line; iron post stamped " U. S. G. S. 5943 " (C. \& G. S. b. m. S $\mathrm{S}_{13}$ )
$5,935.684$
From California-Nevada line northeast along Southern Paciflc R. R. to point 2 miles north of Sunland. (Primary leveling by D. H. Watson in 1913.)

Queen, 2.35 miles southwest of, 0.35 mile southwest of Von Schmidt monument, 75 feet west of railroad, 5 feet west of rock cairn 59 on U. S. C. \& G. S. State line ; iron post stamped " $59431913{ }^{\prime \prime}{ }^{\text {i }} 5,935.684$
Queen, 2.13 miles southwest of, at road crossing near milepost 469 ; top of rail

5, 962.1
Queen, 2 miles southwest of, at "Von Schmidt's" State line; top of rail

5, 977.3
Queen, 1 mile southwest of, in base of "Queen 1 mile" sign; railroad spike

6, 085.08
Queen, in section foreman's yard, 28 feet east of house, 28 feet west of railroad track, under large cottonwood tree; iron post stamped "6179 1913 " ${ }^{1} 6,171.763$
Queen, 0.52 mile northeast of, at road crossing; top of rail__......... 6, 189.4
Queen, 1 mile northeast of, in base of "Queen 1 mile" sign; railroad spike 6, 249.20
Sunland, 6.5 miles southwest of, opposite milepost 465 ; top of rail_- $6,341.4$
Sunland, 5.5 miles southwest of, 0.11 mile north of Nichols, 235 feet west of milepost 464,42 feet west of railroad track, 36 feet northwest of culvert sign 464 A , on bank of small drain, cemented in large boulder; bronze tablet stamped " 64711913 " $\qquad$ ${ }^{1} 6,463.432$
Sunland, 4.5 miles southwest of, opposite milepost 463 ; top of rail_- $6,589.4$
Sunland, 3.28 miles south of, at road crossing, in large canyon; top of rail

6, 732.0
Sunland, 2.5 miles southeast of, opposite milepost 461 ; top of rail_- $6,830.6$
Sunland, 1 mile southeast of, in base of "Sunland 1 mile" sign; railroad spike

7, 004. 6

[^7]Sunland, 33 feet southwest of station, 33 feet west of whistling post, 42 feet west of road crossing, cemented in rock; bronze tablet Feet. stamped " 71291913 " (C. \& G. S. b. m. N 13 )
Sunland, 0.2 mile north of, in summit of saddle; top of rail_-....... 7, 141. 4

Buena Vista, 0.31 mile north of, at road crossing; top of rail_-..- 7, 102. 7
Basalt, 6.5 miles southwest of, opposite milepost 457; top of rail_-_ 7, 034.1
From Silver Peak road junction 4 miles south of The Crossing southwest via Fish Lake to McAfee ranch, thence southeast to State line. (Primary leveling by C. R. Smith in 1897-8.)
The Crossing, 4 miles south of, at Silver Peak road junction; top of iron post of guideboard
$4,731.413$
Fish Lake, opposite Stuart home, between road and shore of Fish
Lake; iron post stamped " 4865 "
WHITE PLAINS QUADRANGLE (NW. $1 / 4$ Carson Sink $1^{\circ}$ quadrangle).
[Latitude $39^{\circ} 30^{\prime}-40^{\circ}$; longitude $118^{\circ} 30^{\prime}-119^{\circ}$.]
From Miriam southwest along the Southern Pacific R. R. to Massie. (Precise leveling by U. S. Coast and Geodetic Survey.)

Miriam, 6.6 meters east of station, at railroad mileage 324.2, 29 meters south of track, 0.8 meter west of telegraph pole in second line of poles, set in cement or stone post; red-metal disk (C. \& G. S. b. m. $\mathrm{A}_{8}$ ) 3, 917. 397
Huxley, 1 mile east of, at mileage 317.6 of Southern Pacific R. R., on east abutment of bridge 317 A ; red-metal disk (C. \& G. S. b. m. Bs ) - 3, 892.391
Parran, on south side of southwest concrete pillar under Southern Pacific R. R. water tank; red-metaì disk (C. \& G. S. b. m. Cs) _--_ 3, 885.953
Desert, 1.5 miles east of, at railroad mileage 308.4 , in top surface of concrete abutment of small railroad bridge; top of a roundheaded bolt (S. P. R. R. b. m.) (S. P.) (C. \& G. S. b. m. D 8 )

3, 890.599
Desert, 0.9 mile west of, 1 meter north of milepole $306,18.8$ meters north of track, 50 meters east of distant signal, set in cement or stone post; red-metal disk (C. \& G. S. b. m. Es)

3, 902.866
Upsal, at railroad mileage 303.6, 200 meters east of 1-mile sign at east side of Upsal, in concrete culvert 303 A ; top of a roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. F 8 )
$3,901.521$
Upsal, 150 meters west of station, on top surface of east abutment of small bridge $301 \mathrm{~A}, 2$ meters south of track and 0.6 meter below it ; red-metal disk (C. \& G. S. b. m. Gs)
$3,905.543$
Falais, 1.2 miles east of, in top surface of west concrete abutment of small bridge 299 A ; top of a roundheaded iron bolt (S. P. R. R. b. m.) (C. \& G. S. b. m. H8)

3, 935.356
Massie, at railroad mileage 293.2, 0.3 mile east of east end of siding, on top surface of east abutment of bridge 293 A ; red-metal disk (C. \& G. S. b. m. Is)

3, 975.451
Massie, at railroad mileage 291.7, 0.3 mile west of west end of siding, on top surface of east abutment of bridge 291 A ; red-metal disk (C. \& G. S. b. m. J ${ }_{\mathrm{s}}$ )

3, 991.816

[^8]
## WINNEMUCOA QUADRANGLE.

## [Latitude $40^{\circ} 30^{\prime}-41^{\circ}$; longitude $117^{\circ} 30^{\circ}-118^{\circ}$. ]

From Golconda west along Southern Pacific R. R. to Cosgrave. (Precise leveling by U. S. Coast and Geodetic Surver.)

Golconda, near, in top surface of west abutment of bridge 2 over Humboldt River, north of track; top of a round-headed iron bolt, the stone is marked on top with the railroad's value of the eleva- Feet. tion, 4348.238 feet (C. \& G. S. b. m. W6) (S. P.)
Golconda, 100 meters west of station, 50 meters south of track, on northwestern one of concrete pillars under water tank; red-metal disk (C. \& G. S. b. m. X ${ }_{6}$ )
Eglon, 41.7 meters north of track, 29.2 meters north of milepost 429 , 1 meter south of north line fence, in cement or stone post; redmetal disk (C. \& G. S. b. m. Y $\mathbf{4}$ )
Tule, 250 meters west of milepost 423,100 meters east of west point of siding, 29 meters south of track, 27 meters north of south line fence, opposite derailing switch to spur, and in line with telegraph poles, set in cement or stone post ; red-metal disk) (C. \& G. S. b. m. Z ${ }_{6}$ ) _- 4, 307.928
Winnemucca, in foundation of Humboldt County courthouse, to left of entrance of Bridge Street, red-metal disk (C. \& G. S. b. m. A ) $_{--} 4,318.315$
Benin, opposite station sign, at railroad mileage 412.2, 60.4 meters south of track, 1.1 meters north of south fence, red-metal disk set in cement or stone post (C. \& G. S. b. m. B ${ }_{7}$ )
$4,298.085$
Rose Creek, 36.4 meters south of south side and in line with west side of station, 45 meters south of track, 0.9 meter north of fence set in cement or stone post ; red-metal disk (C. \& G. S. b. m. C C $)$ $\qquad$ 4,324. 194
Lamar, 0.2 mile east of station sign, 40 meters north of milepost 402, 59.2 meters north of track, 1.3 meters north of fence, in cement or stone post ; red-metal disk (C. \& G. S. b. m. D ${ }_{7}$ )
$4,291.855$
Cosgrave, south of water tank, 30 meters south of track, 0.7 meter north of south line fence, set in cement or stone post; red-metal disk (C. \& G. S. $\mathrm{E}_{7}$ )

## APPENDIX.

## SECONDARY ELEVATIONS.

Secondary elevations from records and topographic maps of the United States Geological Survey, including altitudes of well-known summits and other useful elevations, are given below. These elevations are approximate only and should not be used for accurate work.


| Locality. | Quadrangle. | County. | Elevation. |
| :---: | :---: | :---: | :---: |
| Ely Springs: |  | Lincoln.. | Feet. 4,945 |
| On lava summit about 5 miles southwest of, on east side of Smiley's automobile road | Highland |  |  |
|  |  |  |  |
| Emigrant Peak triangulati |  |  | 6,805 |
| Espina Hill.. |  |  |  |
| Fairview Peak triangulation stat | Carson Sin | Church | 8,243 |
| M |  |  | $\begin{array}{r} 8,145 \\ 11,303 \\ 8,705 \end{array}$ |
| Grant Mountain triangulation st |  |  |  |
| Grapevine Peak.. |  |  |  |
| Highland: |  |  |  |
| About 100 feet west of ranch house of J. B. Wheeler, on south side of road; bronze | Highland | Lincoln | 6,610 |
| Wheeler, on south side of road; bronze tablet stamped "V. A. 6,610." |  |  |  |
| ghland Range: |  |  |  |
| Summit of, 8 miles west of town of Pioche; Highland triangulation tablet stamped "V. A. 9,395." |  |  | 9,395 |
| Jackrabbit triangulation station: <br> On a summit of Bristol Range, 0.7 mile southwest of Jackrabbit Mine and 4.5 miles southeast of Bristol Well; tablet stamped "V A B M 7890." <br> Job Peak triangulation station. | Bristol Range.... | ...do........ | 7,890 |
|  |  |  |  |
|  |  |  |  |
|  | Carson | urc | 8,799 |
| Kawich Peak triangulation station. . | Kawich............... | Nye............... | 9,500 |
| Ladd Mountain. <br> Little Pilot Peak <br> Lone Mountain triangulation station. <br> Lyon Peak. | Bullfrog special. Tonopah. | Esmeralda.......... | 4,1558,0469 |
|  |  |  |  |
|  |  |  |  |
|  |  |  | 9,114 8,784 |
| McCullough Mountain triangulation station....... <br> Magruder Mountain triangulation station. <br> Montezuma Peak triangulation station. <br> Montgomery Mountain. | Ivanpah................. | Clark............ | 6,996 |
|  |  |  | 9,0578,426 |
|  | Lida.......................... | Esmeralda.......... |  |
|  |  |  |  |
|  |  |  |  |  |  |
| Mount Ely: <br> About 2 miles west of town of Pioche; Ely, triangulation tablet stamped "V. A. 7,310." Myers Mountain. | Panaca......... | Lincoln........... | 7,310 |
|  |  |  |  |
|  | Goldfield special | Esmeralda. | 6,310 |
| Newhouse P | Yerington...... | Lyon............. | 5,834 |
| Oreana P | Wellington. | Douglas.... | 9,380 |
| ahute Peak | Long Valley. Tonopah. | Humboldt.. | 8,6188,6688,270 |
| Paradise Peak |  |  |  |
| Peavine Peak |  |  |  |
| Pilot Cone triangulation |  |  |  |  |
| Pilot Peak. | Hawthorne............. | Esmeralda......... |  | 6,602 <br> 9,207 <br> 8 |
| Pond Peak |  |  |  |
| Potosi triangulatio |  |  |  |  |  |
| Powell Mountain | Hawthorne............. | Clark,............. | 8,5009,5456,635 |
| Preble Mountai |  |  |  |
| Prince Consolidated mine: | Panaca.. | Lincoln.. | 5,570 |
| Summit of low hill on west side of large wash, 2.5 miles southwest of; bronze tablet |  |  |  |
| $\begin{aligned} & 2.5 \text { miles southwest } \\ & \text { stamped "V.A. } 5,570 \text {, } \end{aligned}$ |  |  |  |
| Pyramid Lake, water surface. | Reno................... | Washoe........... | 3,869 |
| Quartzite. | Kawich. | Nye.... | 7,795 |
| Rainbow Mountain | Bullfrog special....... | ...do........... | 4,725 |
| Red Hill triangulation station: |  |  | 6,625 |
| Summit of red hill at south end of ridge of which Mount Ely is the north end; triangu- | Panaca. | Lincoln... |  |
| lation tablet stamped "V. A. 6,625 ." |  |  |  |
| Red Mountain triangulation station | Lida................... | Esmeralda ......... | 8,9408,9108,062 |
| Reveille Peak. |  |  |  |
| Rib Hill. | Ely | White Pine |  |
| Salisburg Peak triangulation station. <br> San Antonio Mountain. <br> Saxton Peak. <br> Sheep Peak trianguiation station. <br> Sherman Peak. | Manhattan <br> Tonopah. <br> Ely. <br> Las Vegas. <br> Tonopah. |  | 8,2908,4877,9459,7068,690 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| Locality. | Quadrangle. | County. | Elevation. |
| :---: | :---: | :---: | :---: |
|  |  |  | eet. |
| Singatse Peak.. | Yerington............. | Lyon...... | 6,364 5,950 |
| Skull Mountain. | Curnace Creek.......... | Churchili. | 7,113 |
| Spearhead Point. | Goldfield special | Esmeralda | 6,051 |
| Stirling Mountain. | Las Vegas...... | Nye | 8 8,183 |
| Stonewall Mountain | Lida...... |  | 8,390 |
| Table Mountain. | Carson Sink. | Churchill | 8,283 |
| Tahoe Lake, water surface. | Markleeville-Carson. | \{ Douglas, Nev | 6,225 |
| Tolicha Peak triangulation station. | Kawich. | Nye | 7,030 |
| Toyabe Arc Dome triangulation station | Tonopah. |  | 11,775 |
| Twin Peaks......................... | Carson Sink | Churchi | 7,103 |
| Velvet Peak. | Bullfrog special....... | Nye.. | 3,960 |
| Vindicator Mountain | Goldfield special...... | Esmeralda. | 6,069 |
| Wahguyhe. | Ballarat. | Nye | 8,590 |
| Wheelbarrow Peak........................... | Kawich.............. |  | 8,605 13,145 |
| White Mountains, East Peak, highest point in State yet determined. | C. \& G. S. Report 1900. | Esmeralda. | 13,145 |





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[^0]:    * Out of print.
    ${ }^{1}$ Amargosa region map includes Kawich sheet and parts of Ballarat, Furnace Creek, and Lida sheets.
    : Shows wooded areas.
    ${ }^{3}$ Yosemite National Park map includes part of Bridgeport sheet.
    - Lake Tahoe and vicinity map includes Carson and Markleeville sheets.

[^1]:    ${ }^{1}$ Bench marks set by the United States Reclamation Service.

[^2]:    ${ }^{1}$ Redetermined by U. S. Coast and Geodetic Survey precise leveling, 1915.

[^3]:    ${ }^{1}$ Redetermined by U. S. Coast and Geodetic Survey precise leveling, 1915.

[^4]:    ${ }^{1}$ Part of circuit from Barnwell in which an excessive error has been adjusted.

[^5]:    2, 027. 243

[^6]:    ${ }^{1}$ Redetermined in 1915 by Coast and Geodetic Survey precise leveling.

[^7]:    ${ }^{1}$ Redetermined by U. S. Coast and Geodetic Survey precise line in 1915.
    $75642^{\circ}$-Bull. 654-17-6

[^8]:    ${ }^{1}$ Redetermined by U. S. Coast and Geodetic Survey precise line in 1915.

