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53606

AREA	General Geologic Favorability: Type Intrusive	Sedimentary Section	Apparent Mineralization Intensity	Structure	Favorable Cover or unexplored zones	Total	General Economic Favorability: Past production	Size-Type-grade-tonnage of ore Bodies etc.	Local economic and general situation	General development facility	Total
Dima	2.5	1.5	1.5	2	1	8.5	1.5	2.5	3.5	1.5	9
Patagonia-Harshaw	2.5	1.5	1	1.5	2	8.5	3*	2.5	3.	1.5	10
Empire	2	1.5	2.5	2?	2	10	4.5	2.5	2.5	2	11.5
Oro Blanco	3.5	2.5	2.5	1.5	3	13	1	3	2.5	2	8.5
Huachuca Mts.	2.5	1.5	3	2?	2	11	5	3	1	2.5	11.5
Tombstone	2.5	1.5	1	1.5	1	7.5	2.5	1.5	5	2	11
Cortland-Gleason Central Dragoons	3	1.5	1.5	2	1	9	5?	2.5	2.5	2	12
Johnson	3.5	1.5	1.5	1.5	1	9	4.5	2.5	3	1.5	11.5
Chiricahua Mts.	1	1.5	2	1.5?	3	9	4.5	2	2	3.5	12
Swisshelm Mts.	1	1.5	2.5	2	2.5	9.5	4.5	2.5	3.	2.5	12.5
Araviapa											
Silver Bell Mts.											
Veckol Mts.											
Slate Mts.											
Silver City-Pinos Altos Central-Santa Rita	2	1.5	1	1.5	2	8	0	1	6	1	8
Cooks Peak	2	1.5	2.5	2.5	2.5	11	3.5	3	1.5	2.5	10.5
Organ Mts.	3	2	2	1.5	3	11.5	5	2.5	3	2	12.5
Crogrande	2	2.5	1.5	3?	1.5	10.5	4	3?	1.5	2	11.5
Tres Hermanos	2	2.5	2.5	2	2	11	5	3	2.5	2.5	13
Sierra Rica Mts.	1	1.5	2	2	2	8.5	4.5	2.5	2	2.5	11.5
Apache Hills	1.5	2	2.5	2	2	10	5	2.5	2	2.5	12
Little Hatchet Mts.	3	1.5	2	2	2	10.5	5	2.5	2.5	2	13
Hillsboro Kingston											
Lordsburg											
Pelloncillo Mts.											
Animas Mts.											
Victorio (Gage)	1	2.5	2	2	1.5	9	4.5	3.0	2.5	2	12
Magdalena	1.5	2	1.5	1.5	1.5	8	0	1.5	3	1.5	6

AREA	Further Exploration Favorability: Geological Methods: For more detailed geology	Geophysical Methods: Topography	Depth-Size Factor	Physical Property Contrast	Total	Drilling: Total (Including Geol. Methods)	Relative position	Total	Relative position
Dima	3	1.5	2.5	2.5	6.5	24	(1)	27	(1)
Patagonia-Harshaw	2.5	2.5	3	2	7.5	26	(3)	28.5	(3)
Empire	2.5	2.5	2.5	3	8	27.5	(7)	32?	7
Oro Blanco	2.5	3	2.5	2.5	9	27.5	(7)	32	7
Huachuca Mts.	2	2	3	3	4	26.5	(8)	32.5	8
Tombstone	4	1.5	2.5	2.5	6.5	25	(2)	29.0	4
Cortland-Gleason Central Dragoons	3	1.5	2.5	2.5	6.5	27.5	(5)	32.5	(6)
Johnson	3	1.5	2.5	2?	6	25.5	(4)	29.5	5
Chiricahua Mts.	1	4	3.5	3	10.5	31.5	(10)	32.5	(8)
Swisshelm Mts.	2.5	2.5	3	3	8.5	30.5	(8)	33.0	9
Araviapa									
Silver Bell Mts.									
Veckol Mts.									
Slate Mts.									
Silver City-Pinos Altos Central-Santa Rita	4	3	2.5	2.5	9	24	(1)	28	(2)
Cooks Peak	2.5	2.5	3	2.5	9	29.5	(9)	32.0	(10)
Organ Mts.	3.5	3	3	2.5	9.5	32.5	(12)	36	(13)
Crogrande	2	1.5	2.5	2.5?	6.5	29.5	(6)	30.5	(6)
Tres Hermanos	3	2	2.5	3	7.5	31.5	(11)	34.5	12
Sierra Rica Mts.	3	2.5	2.5	2.5	7.5	27.5	5	34.5	6
Apache Hills	3	2	2.5	3	7.5	31.5	(7)	32.5	(8)
Little Hatchet Mts.	3.5	2	3	2	7	30.5	(6)	34.0	(11)
Hillsboro Kingston									
Lordsburg									
Pelloncillo Mts.									
Animas Mts.									
Victorio (Gage)	3	1.5	3	2.5	7.0	28.0	54	31	64
Magdalena	3.5	2.5	2.5	1.5	6.5	30.5	(0)	24.0	(0)

Production Evaluation

0	- over 100 million lbs.	combined Pb-Zn
1	- 80-100 " "	
1.5	- 70-80 " "	
2	- 60-70 " "	
2.5	- 50-60 " "	
3	- 40-50 " "	
3.5	- 30-40 " "	
4	- 20-30 " "	
4.5	- 10-20 " "	
5	- 0-10 million lbs	combined L-Zn.

ARIZONA

Vol. III - Mineral Resources - Navajo - Hopi Indian Reservations, Arizona - Utah

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Natural Resources of Arizona

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Arizona - Lead Zinc Parts 1 and 2.

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Arizona Geological Society Digest - Volume IV.

Arizona Review -

Arizona Momag Route - Index

Geologic Map of the State of Arizona

Maps - Huachuca Mountains

Lochiel Quadrangle-

Coconino National Forest -

Coronado National Forest - North Division, Arizona

Tonto National Forest

Geographic Positions and Plane Coordinates

Kaibab National Forest, Arizona - Gila and Salt River Meridian,1949.

Sitgreaves National Forest

Gila National Forest - North Half, New Mexico and Arizona

Apache National Forest, New Mexico and Arizona

Map of Arizona

Map of Arizona Mining Districts

Topo Map of Arizona

Metallic Mineral Map of Arizona

Nonmetallic Mineral Map of Arizona

Misc. papers - U.S. Coast and Geodetic Survey - Description of Triangulation Stations

Triangulation Diagram - State of Arizona

Index Map - Control Levelling - State of Arizona

NEVADA

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Circ. 595 - Geochemical and Geophysical Anomalies in the Western Part of the Sheep Creek Range Lander County, Nevada.

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Release - U.S.G.S. June 20,1971 - List of Nevada Maps/

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File - Goldfied District, Esmeralda County, Nevada.

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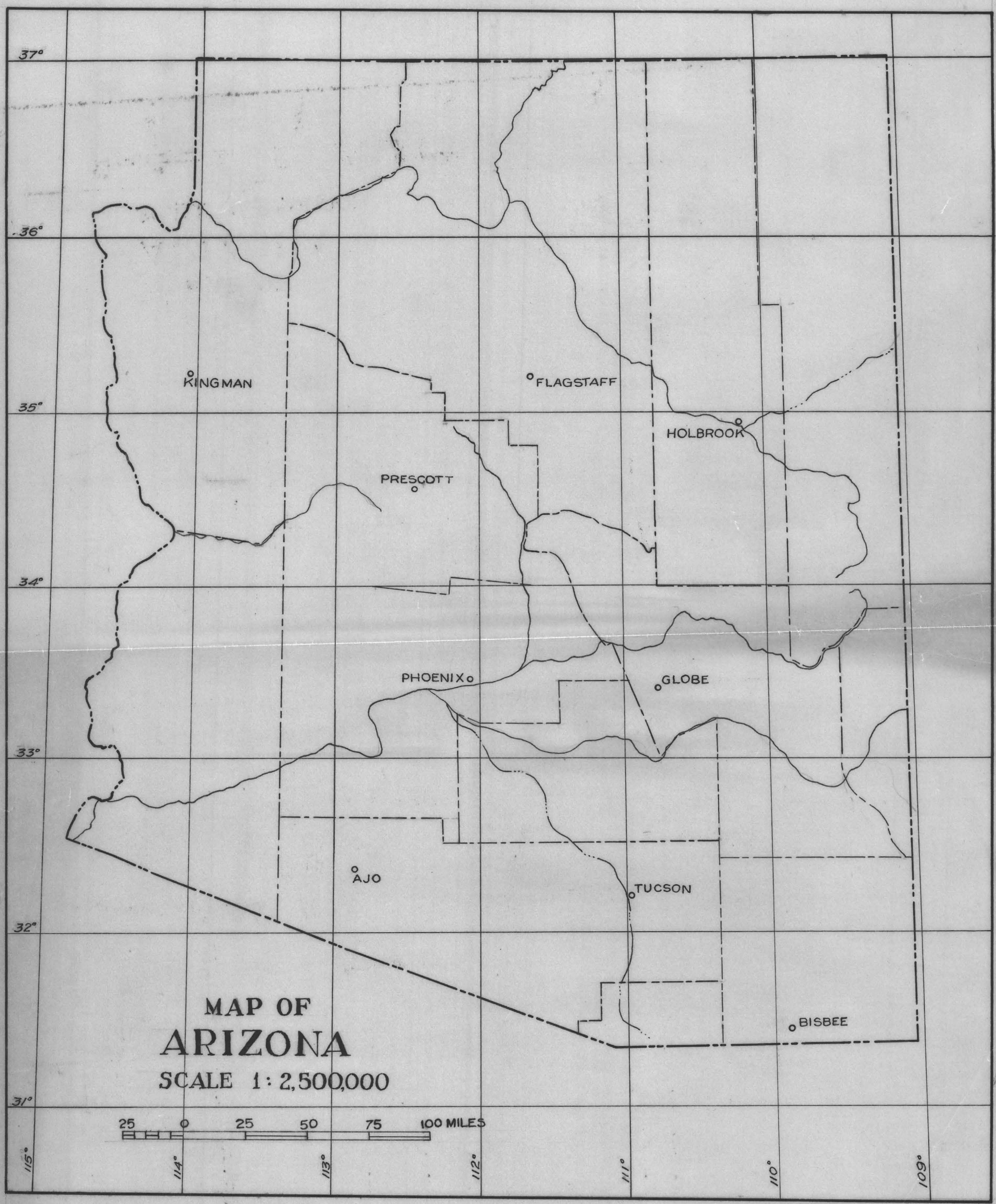
37°
36°
35°
34°
33°
32°
31°
115°
114°
113°
112°
111°
110°
109°
KINGMAN
FLAGSTAFF
HOLBROOK
PRESCOTT
PHOENIX
GLOBE
AJO
TUCSON
BISBEE
MAP OF
ARIZONA
SCALE 1: 2,500,000
25 0 25 50 75 100 MILES

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FORM 26 B

GEOGRAPHIC POSITIONS

Revised: 4/5/43, 3-7-49 183

Accession No. of Computation: Q 3129

Locality 32nd. Parallel, Mescal to Paradise Datum North American 1927 State Arizona

U. S. GOVERNMENT PRINTING OFFICE: 1951 11—10880

STATION	LATITUDE AND LONGITUDE	ELEVATION METERS and FEET	AZIMUTH	BACK AZIMUTH	TO STATION	DISTANCE LOGARITHM (METERS)	DISTANCE METERS	DISTANCE FEET
Aviation Beacon no. 45a	31° 55′ 12.681″		64° 44′ 39.6″	244° 43′ 02.6″	Williams	3.726938	5332.6	17495
1935 (n.d.)	110 22 08.154		139 56 21.7	319 52 16.9	Ridge	4.274945	18834.1	61792
			204 49 06.1	24 51 29.0	Pomerene	4.226798	16857.7	55307
			267 11 29.8	87 15 49.4	St. David	4.110908	12909.5	42354
Airway beacon at landing field	31 57 50.426		64 11 37.2	244 06 40.7	Williams	4.213928	16365.5	53692
1½ miles east of Benson, 1935 (n.d.)	110 15 51.003		164 53 48.4	344 52 51.5	Pomerene	4.033970	10813.6	35478
			324 48 11.2	144 49 11.4	St. David	3.714415	5181.0	16998
Johnson, (U.S.G.S.) cairn, 1935	32 06 42.82		267 53 28	87 57 50	Cochise	4.112949	12970.3	42553
(n.d.) ✓	110 05 37.94		61 56 29	241 55 30	Lime	3.519026	3303.9	10840
Sibyl, 1935; r. 1946	31 59 22.567	1260.6	33 04 21.5	213 02 48.7	St. David	3.926261	8438.4	27685
(d.m.)	110 11 02.035	4136	204 56 050	24 57 57.9	Lime	4.121945	13241.7	43444
			232 57 03.7	52 59 15.1	Adams	3.911142	8149.7	26738
			24 25 09.0		Azimuth mark, black steel stack at St. David, about 3 mi. S.S.W.			
Tee, 1935; r. 1945	32 02 09.425	1273.35	140 17 34.6	320 15 05.0	Cochise	4.062930	11559.2	37924
(d.m.)	109 52 41.820	4177.6	156 50 09.4	336 49 17.8	B.M. 4179 (U.S.G.S.)	3.811128	6473.3	21238
			224 11 39.6	44 15 37.9	Playa	4.226984	16864.9	55331
			336 39 37.9		Azimuth mark, B.M. M-79			
Jog, 1935 (d.m.)	32 04 46.088		241 54 14.6	61 59 50.8	Dos	4.273771	18783.3	61625
	109 45 21.796		297 25 38.7	117 30 09.5	Landmark	4.178661	15089.0	49504
			8 05 22.9	188 04 56.0	Three Sisters	3.976092	9464.4	31051
			179 32 41.9		Azimuth mark, R.M. no. 3			

✓ no check on this position.

TMENT OF COMMERCE
JOAST AND GEODETIC SURVEY
FORM 28 B

GEOGRAPHIC P SITIONS

Accession No. of Computation: G 3129

Locality 32nd. Parallel, Mescal to Paradise Datum North American 1927 State Arizona

U. S. GOVERNMENT PRINTING OFFICE: 1936 11—10889

STATION	LATITUDE AND LONGITUDE	SECONDS IN METERS	AZIMUTH	BACK AZIMUTH	TO STATION	DISTANCE LOGARITHM (METERS)	DISTANCE METERS	DISTANCE FEET
Riggs, 1935 (d.m.)	31° 58′ 54.602″		97° 40′ 14.88″	277° 35′ 43.55″	Pat	4.1324358	13565.50	44506.1
	109 26 00.955		144 51 04.45	324 46 23.85	Dos	4.3811875	24054.01	78917.2
			169 41 20.65	349 40 16.60	Cutoff	4.2472337	17669.89	57972.0
			310 16 29.98	130 21 15.98	Chiricahua	4.2702408	18631.20	61125.9
			250 50 37.9		Azimuth mark, Sugarloaf Lookout House			
Wood, 1935 (d.m.)	32 07 16.745		350 18 29.83	170 20 04.58	Chiricahua	4.4458855	27918.08	91594.6
	109 19 58.966		31 34 34.98	211 31 22.88	Riggs	4.2588594	18149.28	59544.8
			98 39 14.21	278 34 57.51	Cutoff	4.1070673	12795.80	41980.9
			100 14 55.58	280 07 01.86	Dos	4.3749587	23711.48	77793.4
			356 56 15.4		Azimuth mark Monte Vista Lookout House			
Shaw, 1935 (d.m.)	31 58 00.594		96 28 29.61	276 23 32.08	Riggs	4.1716025	14845.76	48706.5
	109 16 39.091		162 59 38.65	342 57 52.60	Wood	4.2532105	17914.74	58775.3
			226 28 42.5		Azimuth mark Pipe in cairn ¼ mi. N.W.			
Bawtry, 1935 (d.m.)	32 07 14.200		29 43 48.86	209 40 32.15	Shaw	4.2929441	19631.08	64406.3
	109 10 28.334		90 20 32.52	270 15 29.11	Wood	4.1748976	14958.83	49077.4
			20 28 49.5		Azimuth mark Fly Peak lookout house			
Round, 1935 (d.m.)	31 57 16.381		97 01 11.83	276 57 27.91	Shaw	4.0489021	11191.86	36718.6
	109 09 36.061		175 44 38.50	355 44 10.77	Bawtry	4.2663369	18464.47	60578.8
			131 26 29.6		Azimuth mark Conchise Head, uses target			
Well, 1935 (d.m.)	31 57 46.067		147 50 11.2	327 48 08.1	Ridge	4.058464	11441.0	37536
	110 25 58.048		231 04 55.8	51 09 20.6	Pomerene	4.226480	16845.4	55267
			350 07 46.1	170 08 10.7	Williams	3.851615	7105.8	23313
			265 16 19.0		Azimuth mark, R.M. no. 3			

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 28 B

GEOGRAPHIC POSITIONS REVISED 3-2-49

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Accession No. of Computation: 63129

Locality 32nd. Parallel, Mescal to Paradise Datum North American 1927 State Arizona

U. S. GOVERNMENT PRINTING OFFICE: 1936 11—10000

STATION	LATITUDE AND LONGITUDE	ELEVATION METERS and FEET	AZIMUTH	BACK AZIMUTH	TO STATION	DISTANCE LOGARITHM (METERS)	DISTANCE METERS	DISTANCE FEET
Three Sisters, 1935 (d.m.)	31 59 41.868		76 58 33.57	256 51 41.45	Dragoon (U.S.G.S.)	4.3217796	20978.75	68827.8
	109 46 12.533		127 24 10.93	307 18 14.81	Cochise	4.3452400	22143.18	72648.1
			129 28 22.14	309 24 04.08	B.M. 4179 (U.S.G.S.)	4.2180943	16523.21	54209.9
			188 04 56.0		Azimuth mark, Jog			
Playa, 1935 (d.m.)	32 08 41.778	1275.8	5 20 53.48	185 20 21.99	Three Sisters	4.2227810	16702.48	54798.1
r. 4.5	109 45 13.226	4186	66 49 54.88	246 45 04.75	B.M. 4179 (U.S.G.S.)	4.1921534	15565.15	51066.7
			80 34 41.82	260 28 13.41	Cochise	4.2879514	19406.69	63670.1
			174 25 48.2 ✓		Azimuth mark, R.M. no. 3			
Landmark, 1935 (d.m.)	32 01 00.149		80 44 34.11	260 39 36.74	Three Sisters	4.1738354	14922.29	48957.5
	109 36 51.470		137 15 14.67	317 10 48.18	Playa	4.2872060	19373.41	63560.9
			204 01 11.9		Azimuth mark			
Pat, 1935 (d.m.)	31 59 53.103	1502.5	88 58 17.86	268 52 07.26	Three Sisters	4.2639297	18362.41	60244.0
r. 4.5	109 34 33.127	4929	119 38 17.55	299 37 04.22	Landmark	3.6208831	4177.18	13704.6
			134 10 21.43	314 04 41.55	Playa	4.3690028	23388.52	76733.8
			220 53 16.3		Azimuth mark, Bonita			
			181 12 01.4		Azimuth mark (WA 6-USGS), 1945			
Dos, 1935 (d.m.)	32 09 32.842	1722.9	358 37 35.95	178 37 44.61	Pat	4.2519256	17861.81	58601.6
r. 4.5	109 34 49.436	5653	11 27 53.44	191 26 48.61	Landmark	4.2071664	16112.63	52862.9
			84 33 00.24	264 27 28.28	Playa	4.2154280	16422.08	53878.1
			158 11 58.1		Azimuth mark, Dos Cabezas, U.S.G.S. Cairn			
			219 18 33.2		Azimuth mark, 1945			
Cutoff, 1935 (d.m.)	32 08 18.997	1820.5	33 24 50.19	213 21 22.33	Pat	4.2709451	18661.44	61225.1
r. 4.5	109 28 01.628	5973	102 02 42.80	281 59 05.80	Dos	4.0384792	10926.45	35847.9
			124 47 44.2		Azimuth mark Dos Cabezas, U.S.G.S. Cairn			
			102 39 20.5		Azimuth mark, 1945			

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FORM NO. 799
Rev. Sept. 1938

PLANE COORDINATES

State Arizona Locality Vicinity of Tombstone North American 1927 datum. Projection Transverse Mercator Zone East

Station	x Coordinate / y Coordinate (Feet)	Plane azimuth / Δα Angle (° ′ ″)	Mark	Station	x Coordinate / y Coordinate (Feet)	Plane azimuth / Δα Angle (° ′ ″)	Mark
Whetstone, 1946	431,823.87			Fargo, 1946	572,672.82	130 55 57 *	(A.H.D. BM) Azimuth Mark
(d.m)	314,062.39	− 0 06 57		(d.m)	270,861.26	+ 0 07 23	
Earp, 1946	434,194.64	268 08 38 *	Azimuth Mark	Comstock, 1946	529,004.15	318 30 51 *	Azimuth Mark
(d.m)	280,842.52	− 0 06 41		(d.m)	261,721.33	+ 0 02 57	
Wyatt, 1946	511,192.76	103 53 57 *	Azimuth Mark	Kendall, 1946	549,008.88	63 59 17 *	Azimuth Mark
(d.m)	304,727.79	+ 0 01 08		(d.m)	267,494.35	+ 0 04 59	
Boquilla, 1946	456,594.70	287 12 25 *	Azimuth Mark	Tomb, 1946	521,170.57	130 34 49 *	(A.H.D. BM) Azimuth Mark
(d.m)	279,588.52	− 0 04 25		(d.m)	273,307.95	+ 0 02 09	
Haber, 1946	549,045.42	64 06 58 *	Azimuth Mark	Tombstone, Courthouse	530,579.19		
(d.m)	297,062.54	+ 0 05 00		Spire, 1946 (n.d)	259,038.33	+ 0 03 06	
Curtis, 1946 (d.m)	490,127.85	325 51 58 *	(A.H.D. BM) Azimuth Mark	Tombstone, Schieffelin	519,868		
	309,632.66	− 0 01 00		Monument, 1946 (n.d)	265,761	+ 0 02 01	
Juan, 1946	464,098.74	334 20 42 *	Azimuth Mark	Benson, S.P.R.R., Standpipe	461,845.92		
(d.m)	316,504.31	− 0 03 40		1946 (d)	352,158.34	− 0 03 55	
Faro, 1946	498,794.00	127 34 14 *	(A.H.D. BM) Azimuth Mark	Benson, S.P.R.R., Water	464,069.92		
(d.m)	297,482.62	− 0 00 07		Tank, 1946 (d)	350,768.47	− 0 03 41	
Fairbank, 1946	486,797.29	23 56 10 *	Azimuth Mark	Whetstone, S.P.R.R.,	447,861.63		
(d.m)	264,944.50	− 0 01 20		Standpipe, 1946 (d)	346,178.67	− 0 05 20	
Nachee, 1946	533,267.00	94 47 50 *	Azimuth Mark	Benson, Water Tank, 1946	458,489.51		
(d.m)	335,450.73	+ 0 03 24		(d)	352,285.29	− 0 04 15	

✓ No check on this position. * This azimuth has been computed by the Δα formula neglecting the second term ** This azimuth has been computed by the formula using both terms.

16—15169 U. S. GOVERNMENT PRINTING OFFICE

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FORM NO. 769
Rev. Aug. 1945

PLANE COORDINATES

Globe to Clifton; Vicinity of Tucson,

State Arizona Locality Southeastern Arizona North American 1927 datum. Projection Transverse Mercator Zone Central

Station	x Coordinate / y Coordinate (Feet)	* Plane azimuth ~~(or~~ Δα) angle (° ′ ″)	Mark	Station	x Coordinate / y Coordinate (Feet)	* Plane azimuth ~~(or~~ Δα) angle (° ′ ″)	Mark
Coolidge, 1945	932,701.18	206 39 27	Azimuth Mark	Coolidge Dam, water	924,597.05		
d.m.	783,434.77	+ 0 46 23		tank, 1945 d.	794,190.08	+ 0 45 34	
Boot, 1945	938,195.52	207 17 10	Azimuth Mark	Twin R.M. No. 3 (USGS),	978,861.20	295 32 21	Azimuth Mark
d.m.	820,156.44	+ 0 47 09		1946; r. 1947 d.m.	421,131.32	+ 0 49 24	
Soda, 1945	928,974.59	310 25 26	Azimuth Mark	Twin (USGS-1937), 1946;	978,852.12		
d.m.	817,118.58	+ 0 46 08		r. 1947 d.m.	421,158.38	+ 0 49 24	
Coal (USGS-1936),	911,019.94			Blanca (USGS-1940),	996,869.87		
1945; r. 1948 d.m.	764,491.29	+ 0 43 58		1946; r. 1947 d.m.	483,005.94	+ 0 51 35	
Jones, 1945	981,112.14	5 54 25	Azimuth Mark	Casca, 1946; r. 1947	982,992.31	3 40 19	Azimuth Mark
d.m.	779,680.94	+ 0 51 32		d.m.	468,491.92	+ 0 50 04	
Salt Mtn, 1945	986,402.98	223 17 04	Azimuth Mark	WA 25 (USGS-1940),	997,136.21	276 23 18	Azimuth Mark
d.m.	825,125.56	+ 0 52 21		1946; r. 1947 d.m.	442,836.07	+ 0 51 24	
Hidden, 1945	965,473.19	133 02 33	Azimuth Mark	Guilla, 1946; r. 1947	961,649.67	197 20 37	Azimuth Mark
d.m.	766,995.31	+ 0 49 48		d.m.	455,022.78	+ 0 47 48	
Cot, 1945	956,474.91	196 08 21	Azimuth Mark	Fiety (USGS-1937),	923,125.97	320 40 39	Azimuth Mark
d.m.	792,235.23	+ 0 48 58		1947 d.m.	494,747.91	+ 0 44 00	
Pump, 1945	974,555.38	218 46 20	Azimuth Mark	Rocks (USGS-1940),	974,108.13	3 08 20	Azimuth Mark
d.m.	814,447.72	+ 0 51 01		1947 d.m.	533,476.75	+ 0 49 30	

[1] No check on this position. * This azimuth has been computed by the Δα formula neglecting the second term. ** This azimuth has been computed by the formula using both terms.

16—15160-1 U. S. GOVERNMENT PRINTING OFFICE

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form No. 709
Rev. Aug. 1945

PLANE COORDINATES

State Arizona — Locality Vicinity of Tucson, Southeastern Arizona — North American 1927 datum. Projection Transverse Mercator — Zone Central

Station	x Coordinate / y Coordinate	* Plane azimuth (~~Δα~~ Δα) angle	Mark
	Feet	° ′ ″	
Kilberg, 1946; r. 1947	979,261.57	70 35 37	Azimuth Mark
d.m.	569,351.20	+ 0 50 13	
Bell, 1946; r. 1947	964,178.19	9 04 33	Azimuth Mark
d.m.	492,465.39	+ 0 48 15	
Redfield, 1947	954,677.49	89 28 50	Azimuth Mark
d.m.	508,031.69	+ 0 47 20	
Alder, 1947	909,727.34	293 56 07	Azimuth Mark
d.m.	540,791.47	+ 0 42 49	
Kellogg (USGS), 1947	872,851.88	329 51 34	Azimuth Mark
d.m.	516,412.11	+ 0 38 52	
Clum, 1947	886,672.11	336 18 16	Azimuth Mark
d.m.	473,334.40	+ 0 40 07	
Pedro, 1947	951,165.22		
d.m.	547,132.31	+ 0 47 10	
Redington (USGS), 1947	946,135.24		
d.m.	546,377.30	+ 0 46 38	
Pepper, 1947	884,632.07	110 51 27	Azimuth Mark
d.m.	572,470.59	+ 0 40 19	

Station	x Coordinate / y Coordinate	* Plane azimuth (~~Δα~~ Δα) angle	Mark
	Feet	° ′ ″	
Maverick (USGS-1937), 1946; r. 1947	959,789.22	99 28 28	Azimuth Mark
d.m.	623,059.52	+ 0 48 27	
Table, 1946; r. 1947	929,481.12	3 19 13	Azimuth Mark
d.m.	666,474.70	+ 0 45 28	
Table R.M. No. 1 (USGS-1936), 1946; r. 1947	929,476.76		
d.m.	666,500.52	+ 0 45 28	
Table R.M. No. 2 (USGS-1936), 1946; r. 1947	929,492.10		
d.m.	666,483.33	+ 0 45 28	
Signal (USGS-1937), 1947	860,560.66	215 37 55	Azimuth Mark
d.m.	626,806.64	+ 0 38 01	
Sacaton, 1947	924,316.42	70 24 54	Azimuth Mark
d.m.	579,716.71	+ 0 44 31	
Mammoth, 1947; r. 1948	887,878.21	81 41 14	Azimuth Mark
d.m.	621,696.50	+ 0 40 53	
Copper, 1947; r. 1948	920,496.08	253 58 04	Azimuth Mark
d.m.	636,097.02	+ 0 44 23	

[1] No check on this position. * This azimuth has been computed by the Δα formula neglecting the second term. ** This azimuth has been computed by the formula using both terms.

16—15160-1 U. S. GOVERNMENT PRINTING OFFICE

CLASSIFICATION AND STANDARDS OF ACCURACY

TABLE I

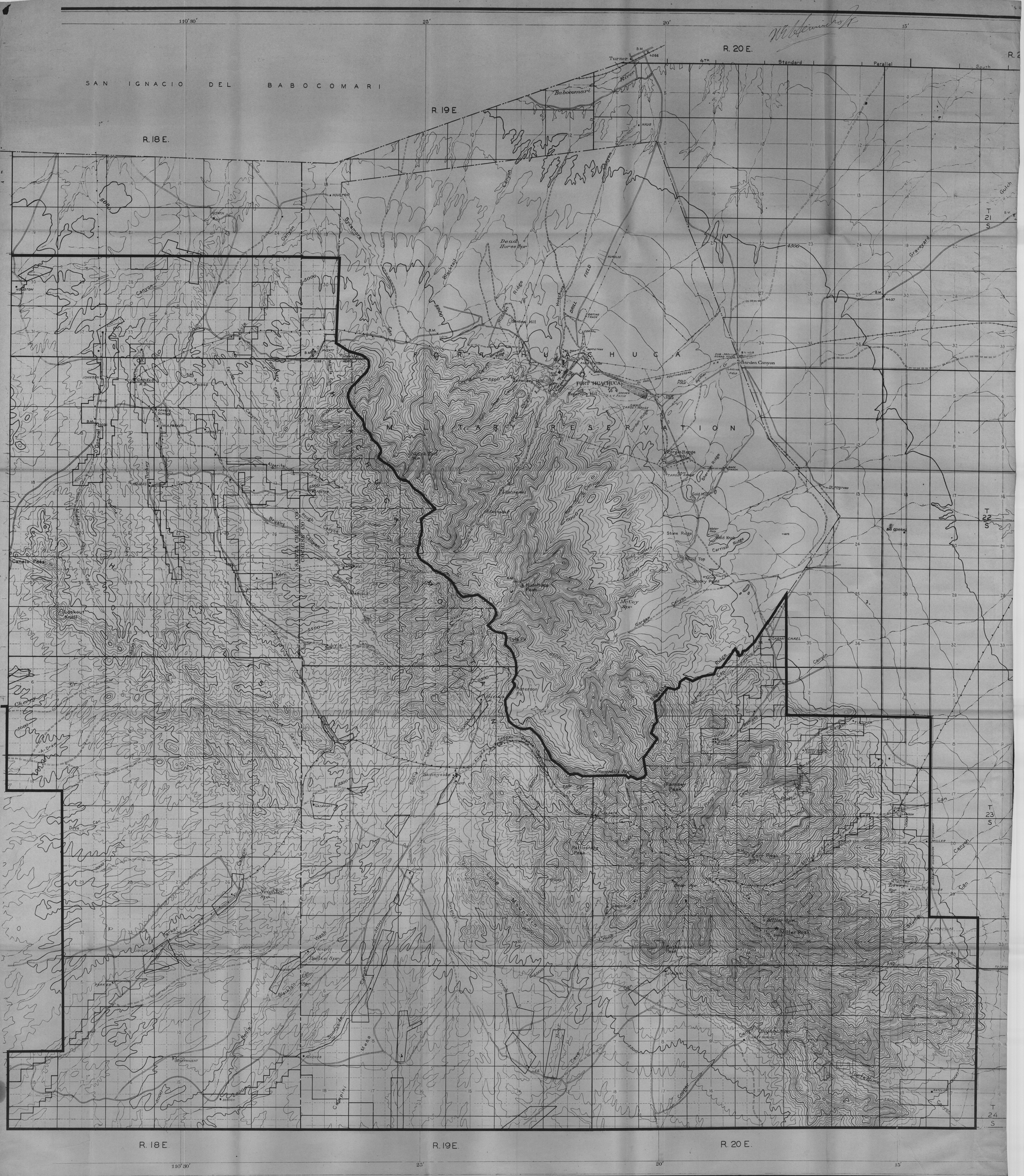
TRIANGULATION

	First-order			Second-order		Third-order
	Class I (Special)	Class II (Optimum)	Class III (Standard)	Class I	Class II	
Principal uses	Urban surveys, scientific studies	Basic network	All other.	Area networks and supplemental cross arcs in national net	Coastal areas, inland waterways and engineering surveys	Topographic mapping
Spacing of arcs or principal stations *	Stations: 1-5 miles or greater as required	Arcs: 60 miles. Stations: 10-15 miles	Stations: 10-15 miles	Stations: 4-10 miles	As required	As required
Strength of figure						
ΣR_1 between bases						
Desirable limit	25	60	80	80	100	125
Maximum limit	30	80	110	120	130	175
Single figure						
Desirable limit						
R_1	5	10	15	15	25	25
R_2	10	30	50	70	80	120
Maximum limit						
R_1	10	25	25	25	40	50
R_2	15	60	80	100	120	170

*Additional stations of same accuracy may be interspersed among principal stations

TABLE I
(continued)

	First-order			Second-order		Third-order
	Class I	Class II	Class III	Class I	Class II	
Base measurement						
Actual error not to exceed	1 part in 300,000	1 part in 300,000	1 part in 300,000	1 part in 300,000	1 part in 150,000	1 part in 75,000
Probable error not to exceed	1 part in 1,000,000	1 part in 1,000,000	1 part in 1,000,000	1 part in 1,000,000	1 part in 500,000	1 part in 250,000
Triangle closure						
Average not to exceed	1"	1"	1"	1".5	3"	5"
Maximum seldom to exceed	3"	3"	3"	5"	5"	10"
Side checks						
Ratio of maximum difference of logs of sides to tab. diff. for 1" of log sine of smallest angle	1.5	1.5-2	2	2-4	4	10-12
OR in side equation test, average corr. to direction not to exceed	0".3	0".4	0".4	0".6	0".8	2"
Astro. Azimuths						
Spacing-figures	6-8	6-10	8-10	8-10	10-12	12-15
Probable error	0".3	0".3	0".3	0".3	0".5	2".0
Closure in length (also position when applicable) after side and angle conditions have been satisfied, should not exceed	1 part in 100,000	1 part in 50,000	1 part in 25,000	1 part in 20,000	1 part in 10,000	1 part in 5,000



110°30'
25'
20'
15'
SAN IGNACIO DEL BABOCOMARI
R. 18 E.
R. 19 E.
R. 20 E.
4TH Standard Parallel South
Turner
Babocomari River
T 21 S
T 22 S
T 23 S
T 24 S
FORT HUACHUCA
MILITARY RESERVATION
Garden Canyon
Huachuca Peak
Sunnyside
Miller Peak
Canelo Pass
Lookout Knoll
Stone Ridge
Carrisal Ridge
Rocky Point
Rattlesnake Peak
Sutherland Peak
Kern
Graveyard Gulch
Dead Horse Spr