Interstate Compact Defining the Boundary Between the States of Arizona and California Interstate Compact Defining the Boundary Between the States of Arizona and California

# INTERSTATE COMPACT DEFINING THE BOUNDARY BETWEEN THE STATES OF ARIZONA AND CALIFORNIA

### Article I. Furpose.

The boundary between the States of Arizona and California on the Colorado River has become indefinite and uncertain because of meanderings in the main channel of the Colorado River with the result that a state of confusion exists as to the true and correct location of the boundary, and the enforcement and administration of the laws of the two states and of the United States have been rendered difficult.

The purpose of this compact is to fix by reference to stations of longitude and latitude the location of the boundary line between Arizona and California on the Colorado river from the southern boundary of the state of Nevada to the point on the international boundary which is common to the boundaries of Arizona and California and the United Mexican States.

### Article II. Description.

The boundary between the states of Arizona and California on the Colorado river from the point where the oblique boundary between California and Nevada intersects the thirty-fifth degree of north latitude, said point being common to the boundaries of the states of Arizona, California and Nevada, to the point on the international boundary which is common to the boundaries of Arizona, California and the United Mexican States, shall be in accordance with the following description in general terms of 34 points on the boundary:

## General Description of Boundary Between Arizona and California

Point No. 1. The intersection of the boundary line common to California and Nevada and the centerline of the channel of the Colorado River as constructed by the U. S. Bureau of Reclamation, said point being common to the boundaries of Arizona, California, and Nevada, where the 35th degree of north latitude intersects the centerline of said channel; thence downstream along and with the centerline of said channel to the southerly end of said construction to

Point No. 2, which is located in the center of the channel of the Colorado River approximately one-half mile northerly from the A.T.&S.F. Railway Bridge at Topock, thence downstream on a straight line to

Point No. 3, which lies in the Colorado River vertically below the centerline of the A.T.&S.F. Railway tracks at a point midway face-to-face of abutments of the A.T.&S.F. Railway Bridge at Topock, Arizona: thence on a straight line downstream to

Point No. 4, which lies in the Colorado River vertically below the centerline of U. S. Highway 66 at a point where said centerline intersects the center of the center pier of the highway bridge; thence on a straight line to Point No. 5, which lies in the Colorado River vertically below the center of the span of the gas line bridge owned by the El-Paso Natural Gas Co. and the Pacific Gas and Electric Co., crossing the Colorado River at Topock, Arizona; thence downstream in a southerly direction through Havasu Lake along a line midway between the right and left shore lines of said lake as they exist at mean operating level (elevation 448.00 above Mean Sea Level), as controlled at Parker Dam to

Point No. 6, which is the center of the overflow section of Parker Dam across the Colorado River; thence downstream midway between the shore lines on the right and left banks of the Colorado River to

Point No. 7, which lies in the center of the Colorado River approximately 2,050 feet upstream from the earth fill of Headgate Rock Dam; thence on a straight line to

Point No. 8, which is the center of the earth fill of Headgate Rock Dam; thence on a straight line to

Point No. 9, which lies on the centerline of the river approximately 3,625 feet westerly from Point No. 8; thence on a straight line to

Point No. 10, which lies in the center of the Colorado River at a point where the parallel of 34° 10' north latitude intersects said centerline; thence on a straight line to

Point No. 11, which lies in the Colorado River vertically below the centerline of Arizona Highway No. 72 midway between the abutments of the highway bridge; then down the Colorado River midway between the right and left shore lines across islands which may exist between those water lines to

Point No. 12, which is at the center of the earth fill section of the Palo Verde Diversion Dam; thence down the Colorado River midway between the shore lines on the right and left banks to

Point No. 13, which is vertically below the center of the center span of the highway bridge across the Colorado River at Ehrenberg, Arizona (U. S. Highway 60-70); thence down the Colorado River midway between the shore lines on the right and left banks to

Point No. 14, which is the center of the Cibola Bridge midway between abutments; thence down the Colorado River midway between the shore lines on the right and left banks, ignoring future channelization by the U. S. Bureau of Reclamation to

Point No. 15, which lies on the centerline of the Colorado River approximately 8400 feet northward of the center of the overflow section of Imperial Dam; thence on a straight line to

Point No. 16, which is the center of the overflow section of Imperial Dam; thence on a straight line normal to the longitudinal axis of Imperial Dam to Point No. 17, which lies at the intersection of the last described line with a line extending northeasterly from the center of the overflow section of Laguna Dam and normal to the longitudinal axis of the said Laguna Dam; thence southeasterly on a straight line to

Point No. 18, which is at the center of the overflow section of Laguna Dam; thence on a straight line to

Point No. 19, which lies on the centerline of the Colorado River approximately 5800 feet southwesterly of Point 18: thence down the Colorado River midway between the shore lines on the right and left banks, around a curve to the eastward to

Point No. 20, which lies on the centerline of the Colorado River where said centerline intersects the section line between Sections 4 and 9. Township 8 South, Range 22 West, Gila and Salt River Meridian; thence departing from the river on a west-erly course along the extension of the above-mentioned section line about 0.65 mile to

Point No. 21, which will be the northwest corner of the northeast quarter of Section 8, Township 8 South, Range 22 West. Gila and Salt River Meridian, which shall be resurveyed in establishing this boundary; thence southerly along the centerline of said Section 8 about one-half mile to

Point No. 22, which is the northeast corner of the southwest quarter of Section 8, Township 8 South, Range 22 West, Gila and Salt River Meridian: thence westerly about one and one-half miles to

Point No. 23, which is the west quarter corner of Section 7, Township 8 South, Range 22 West, Gila and Salt River Meridian; thence southerly about one-half mile to

Point No. 24, which is the southwest corner of Section 7, Township 8 South, Range 22 West, Gila and Salt River Meridian; thence westerly about one mile to

Point No. 25, which is the southwest corner of Section 12, Township 8 South, Range 23 West, Gila and Salt River Meridian, thence southerly about one-half mile to

Point No. 26, which is the west quarter corner of Section 13, Township 8 South, Range 23 West, Gila and Salt River Meridian; thence westerly about 1.93 miles to

Point No. 27, which lies on the east shoulder of the northsouth road through the Indian School approximately 370 feet due east of the northwest corner of the southwest quarter of the southwest quarter of Section 25, Township 16 South, Range 22 East. San Bernardino Meridian: thence southerly along and with the easterly shoulder line of the said north-south road approximately 700 feet to

Point No. 28, which lies on the easterly shoulder line of said north-south road due east of the northeast corner of the stone retaining wall around the Indian School Hospital; thence due west to

Point No. 29, which is the base of the northeast corner of said retaining wall; thence southerly along and with the westerly shoulder of said north-south road to

Point No. 30, which lies on the westerly shoulder line of said north-south road 330 feet south of and approximately 110 feet east of the northeast corner of Section 35, Township 16 South, Range 22 East, San Bernardino Meridian; thence due west approximately 110 feet to

Point No. 31, which lies on the east line of Section 35. Township 16 South, Range 22 East, San Bernardino Meridian, exactly 330 feet south of the northeast corner of said Section 35; thence southerly along the east line of said Section 35 to

Point No. 32, which lies at the center of the Colorado River. i.e., midway between the north and south shore lines just downstream from the centerline of the old U. S. Highway 80 Bridge across the Colorado River; thence down the center line of the Colorado River midway between the shore lines on the right and left banks to

Point No. 33, which is a point in the Colorado River vertically below the center of the new U. S. Highway 80 Bridge; thence down the centerline of the Colorado River midway between the shore lines on the right and left banks to

Point No. 34, which is the intersection of the centerline of the Colorado River and the International Boundary Line between California and the United Mexican States, which point is common to the boundaries of Arizona, the United Mexican States, and California.

These points will be marked on existing bridges and dams and where appropriate will be monumented. Between each of these points will be a number of subpoints not monumented. The total number of points and subpoints will approximate 234. The United States Coast and Geodetic Survey will locate the above mentioned 34 points on the boundary by precise geodetic surveys. The Coast and Geodetic Survey will locate the remaining approximately 200 unmonumented subpoints by precise photogrammetric methods and will provide a list of the geographic positions and state coordinate positions (transverse Mercator system for Arizona and Lambert system for California) of each of the 234 points on the boundary. The approximately 200 unmonumented subpoints will be identified on copies of the aerial photographs by the State of Arizona and California to define the boundary; the Coast and Geodetic Survey will then locate the points so identified by analytic aerotriangulation (photogrammetric methods).

When the survey and boundary description has been completed by the United States Coast and Geodetic Survey and the Boundary Commissions of Arizona and California have each certified that it is in conformity with the General Description of Boundary between Arizona and California set forth herein, it shall be attached hereto and marked Exhibit "A" and made a part hereof as though fully incorporated herein as the permanent description of the boundary between the states of Arizona and California.

#### Article III. Ratification and Effective Date.

This compact shall become operative when it has been ratified and approved by the legislatures of the states of Arizona and California, and approved by the Congress of the United States.

Executed in duplicate this 12th day of March, A.D., One Thousand Nine Hundred and Sixty-three, at Sacramento, California.

## FOR THE STATE OF ARIZONA

#### /s/ WAYNE M. AKIN

WAYNE M. AKIN
Chairman of the Arizona
Interstate Stream Commission.
Chairman

#### /s/ ROBERT W. PICKRELL

ROBERT W. PICKRELL Attorney General, Member

#### /s/ OBED M. LASSEN

OBED M. LASSEN
State Land Commissioner,
Member

## FOR THE STATE OF CALIFORNIA

### /s/ F. J. HORTIG

F. J. HOSTIG Executive Officer, State Lands Commission, Chairman

#### /s/ STANLEY MOSK

STANLEY MOSK Attorney General, Member

#### /s/ WILLIAM E. WARNE

WILLIAM E. WARNE Director. Department of Water Resources. Member

#### ATTESTED:

#### /s/ HOWARD F. THOMPSON

HOWARD F. THOMPSON Executive Secretary Colorado River Boundary Commission of Arizona

#### ATTESTED:

#### /s/ BERRIEN E MOORE

Executive Secretary Colorado River Boundary Commission of California

## **EXHIBIT** "A"

Description of 249 Points on Boundary between Arizona and California, prepared for Boundary Commissions of Arizona and California by the United States Coast and Geodetic Survey.

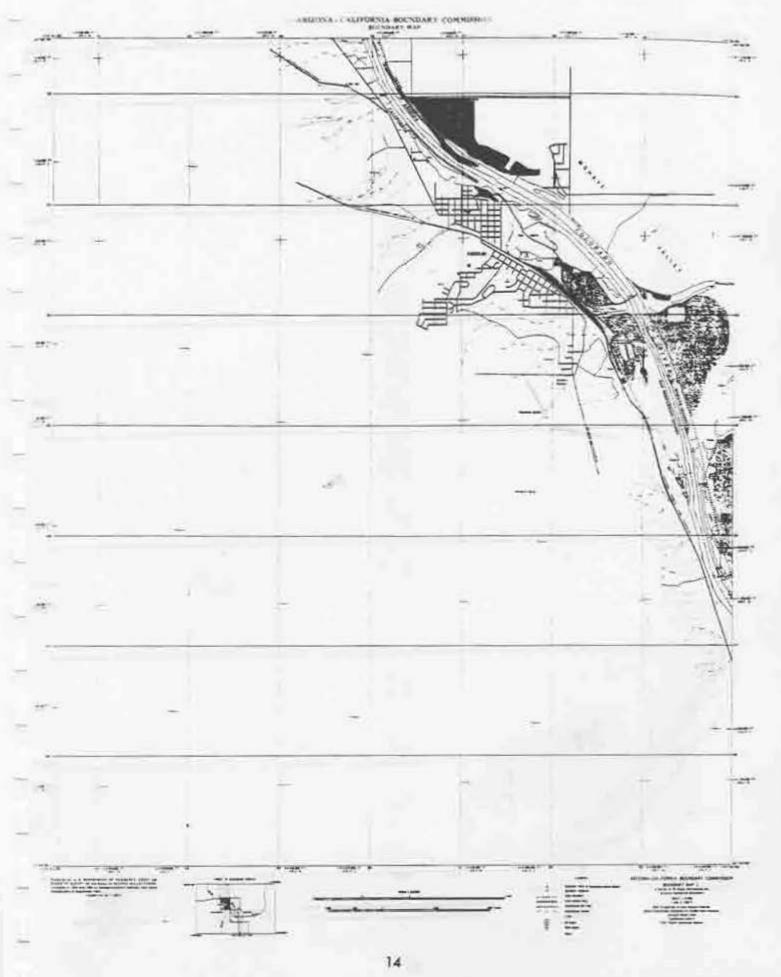
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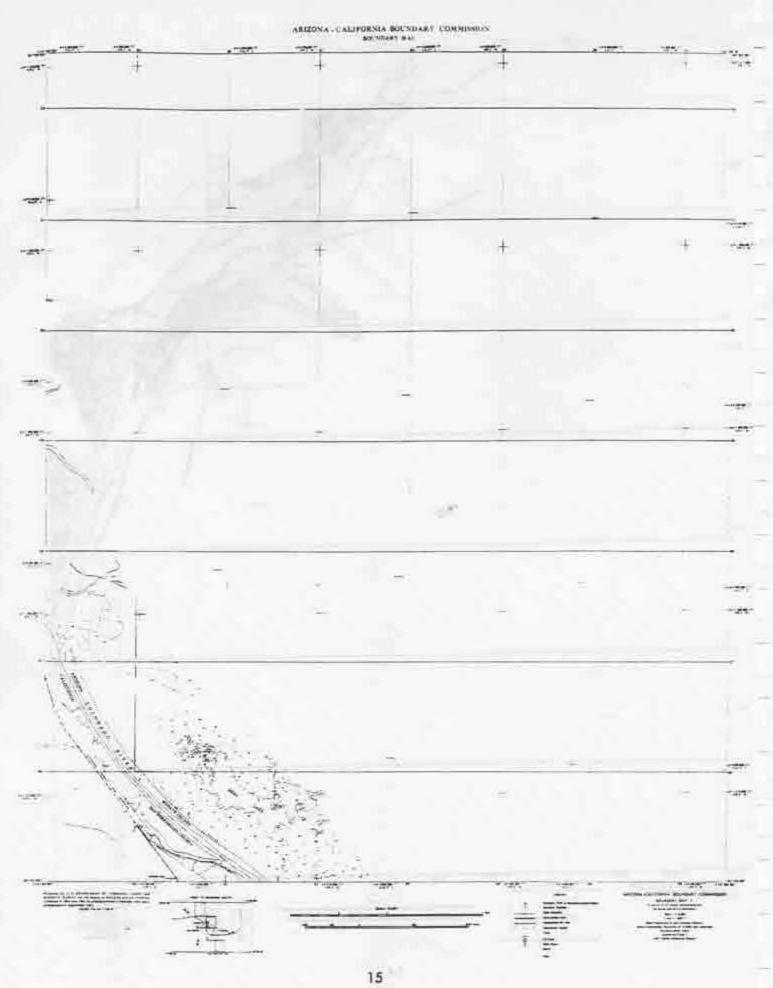
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## ARIZONA-CALIFORNIA BOUNDARY COMMISSIONS

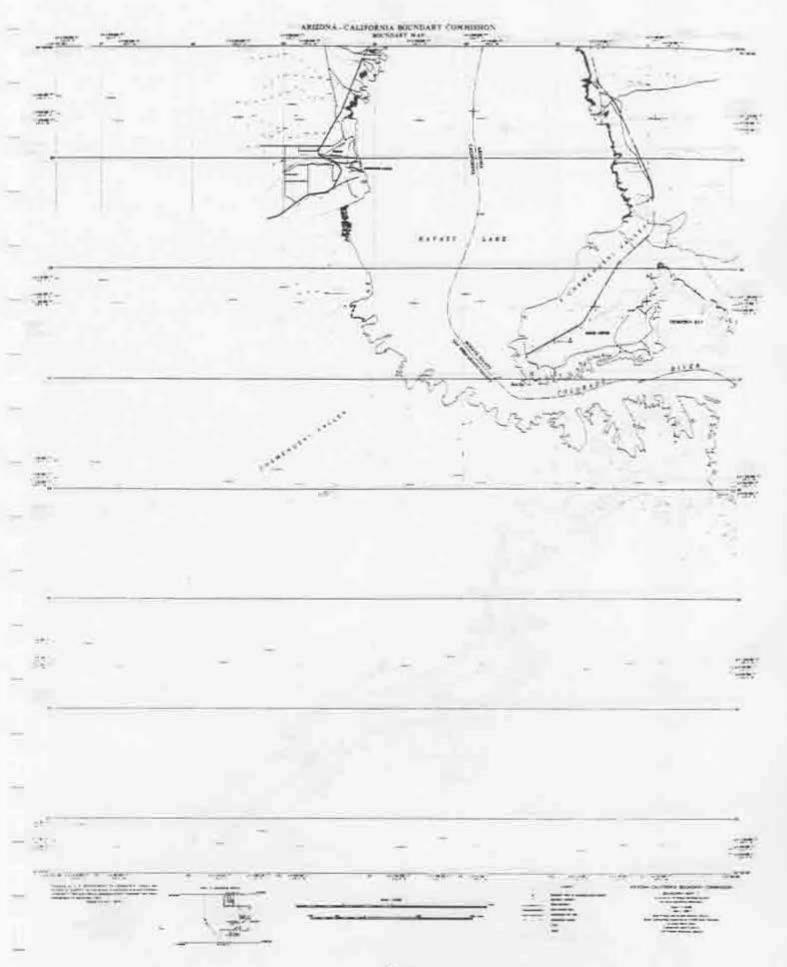
## BOUNDARY MAPS

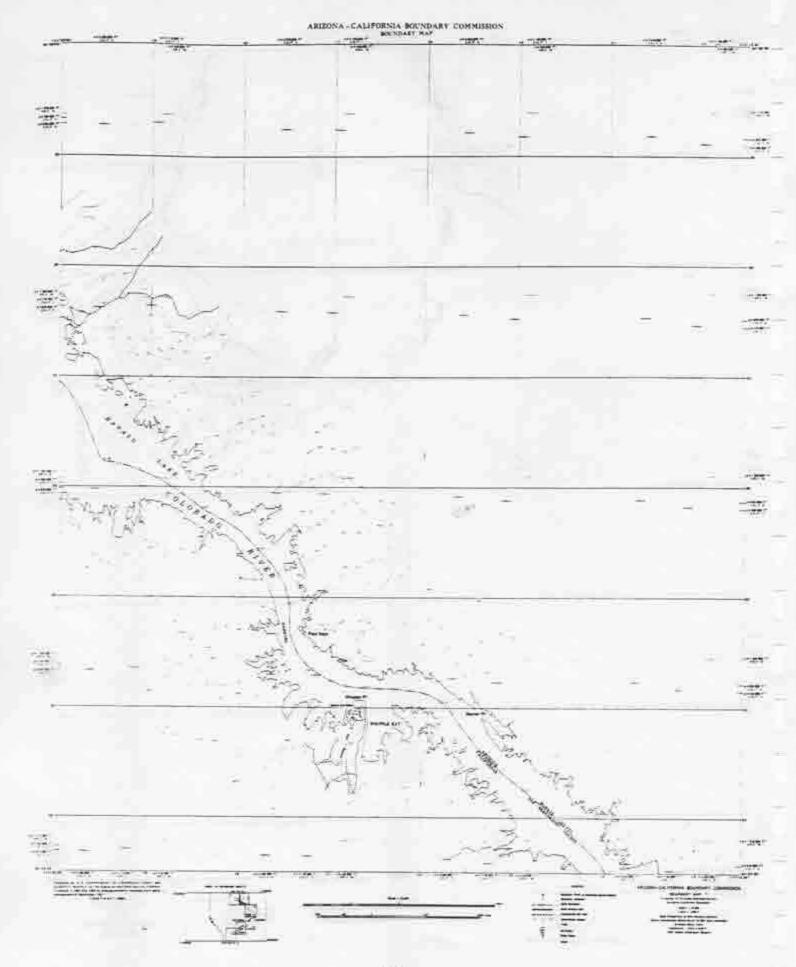
A series of 25 Planimetric Maps delineating the Arizona-California Boundary and showing the 34 Boundary Points and 215 Boundary Subpoints.

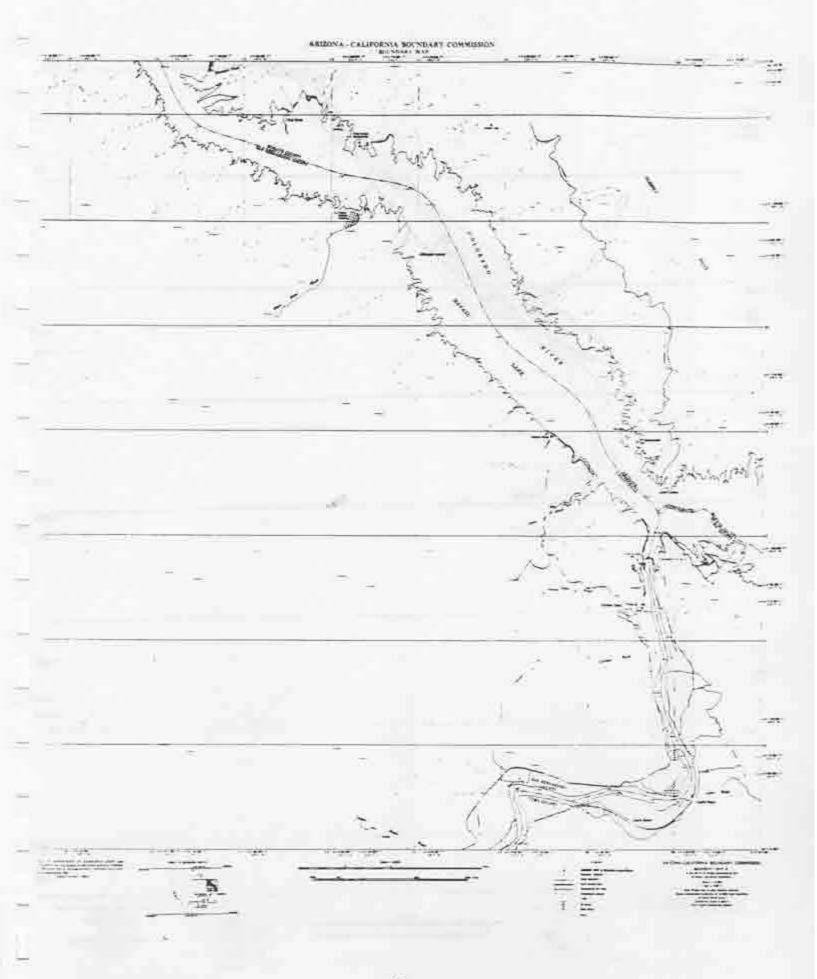




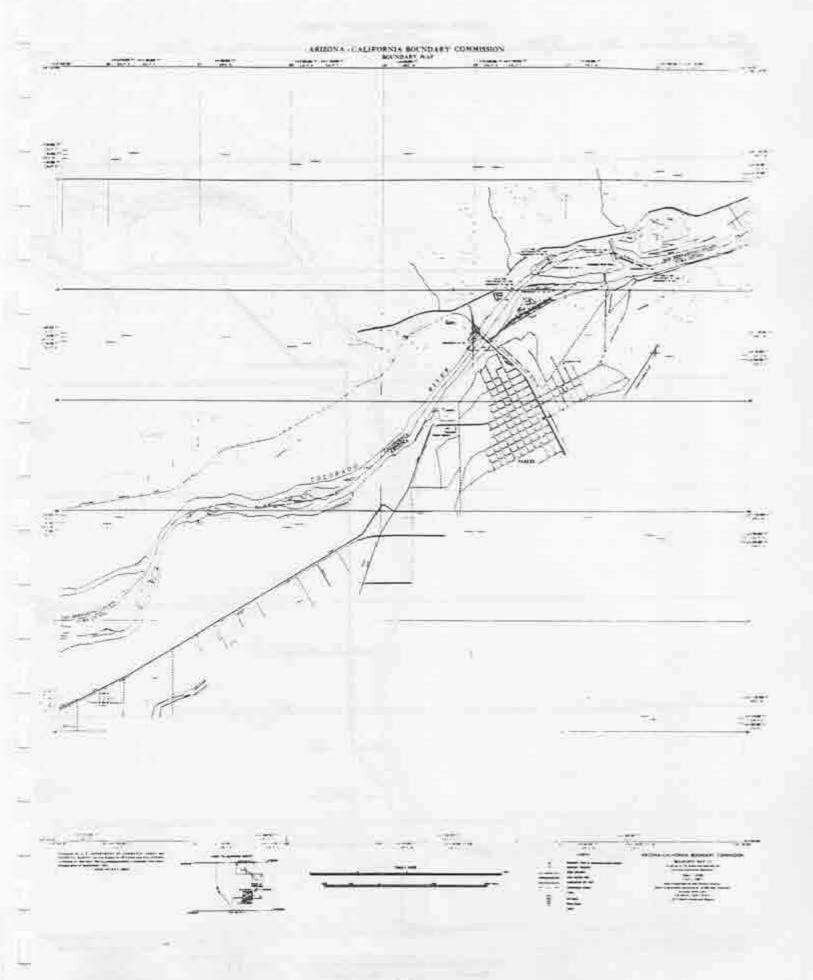


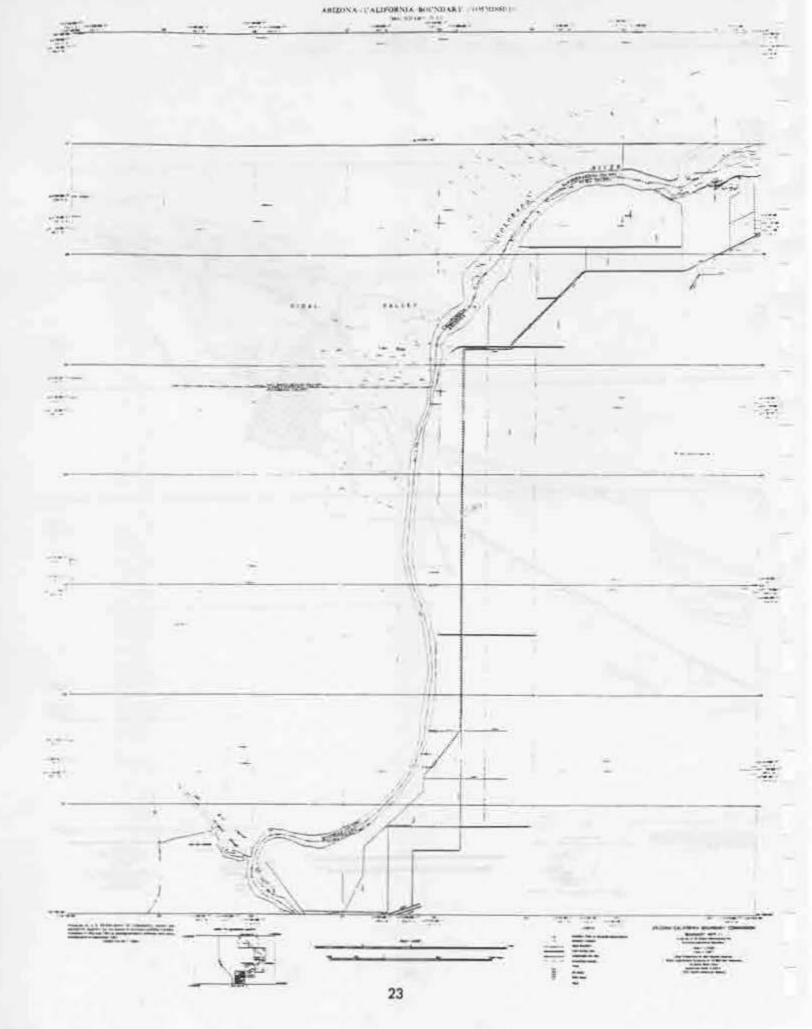


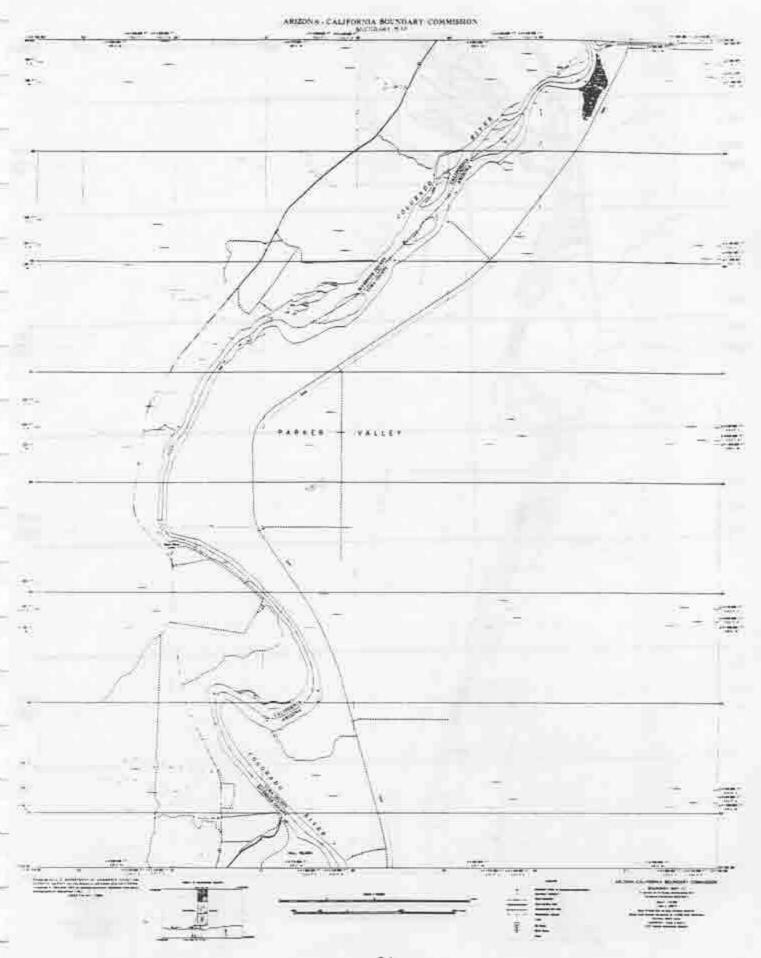








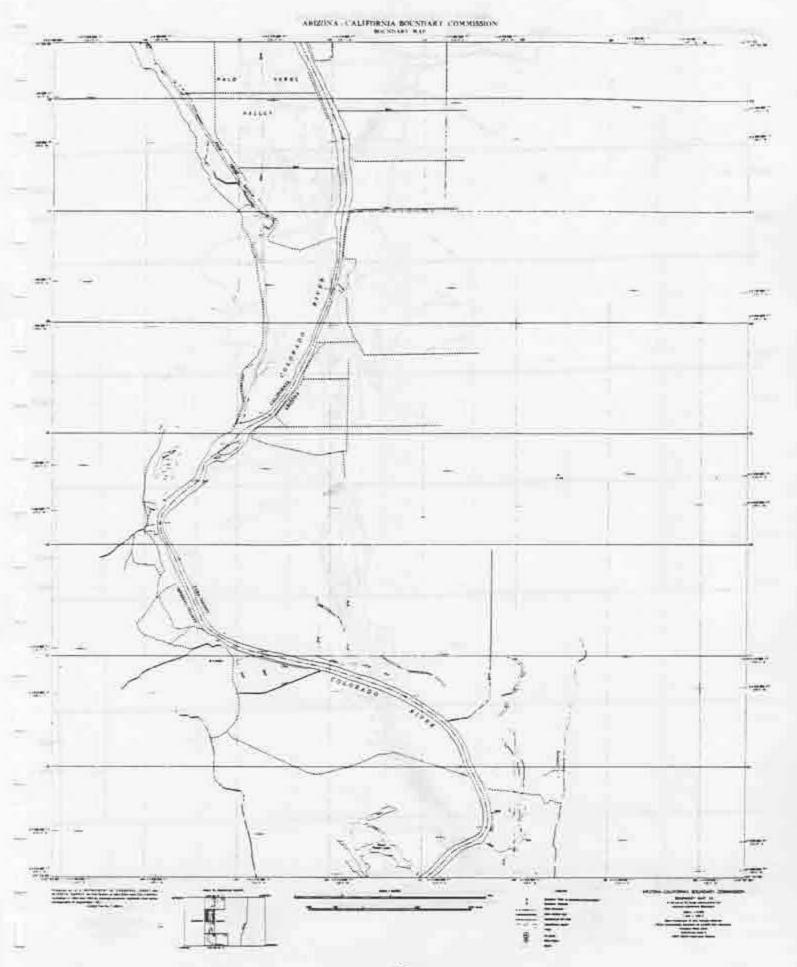


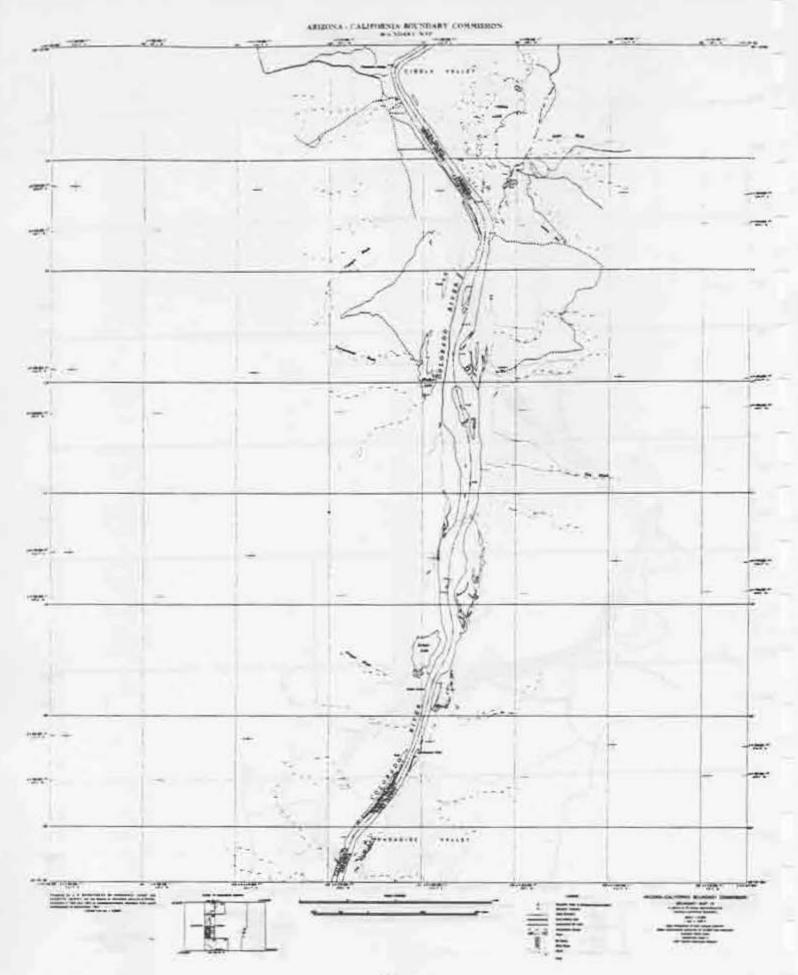


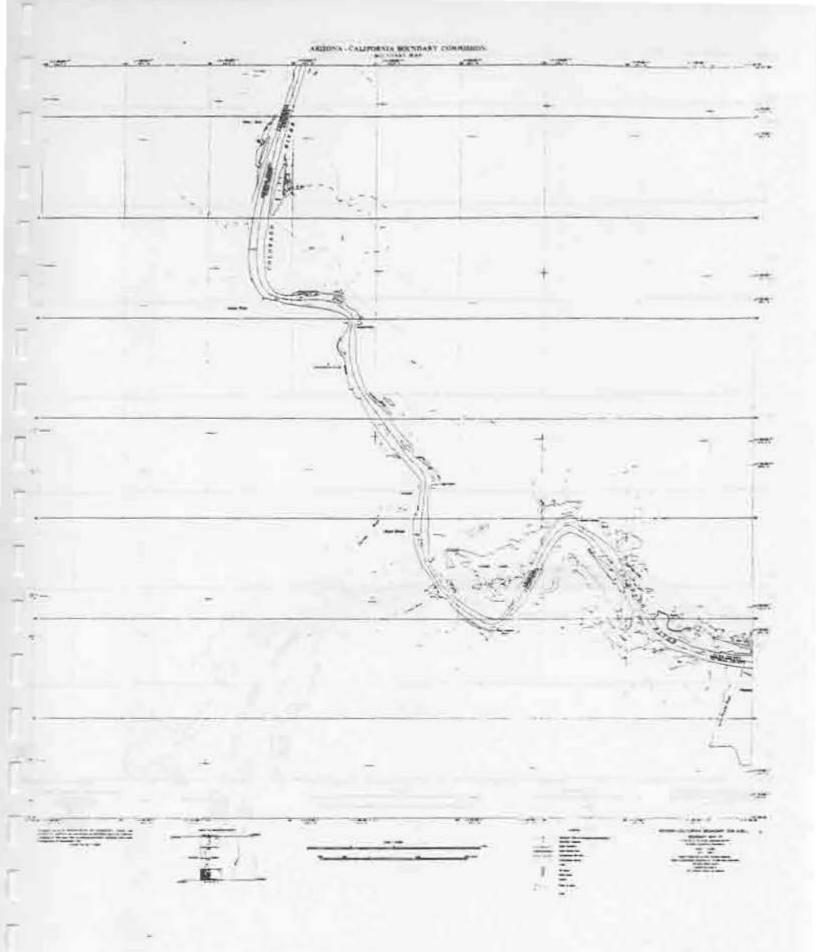


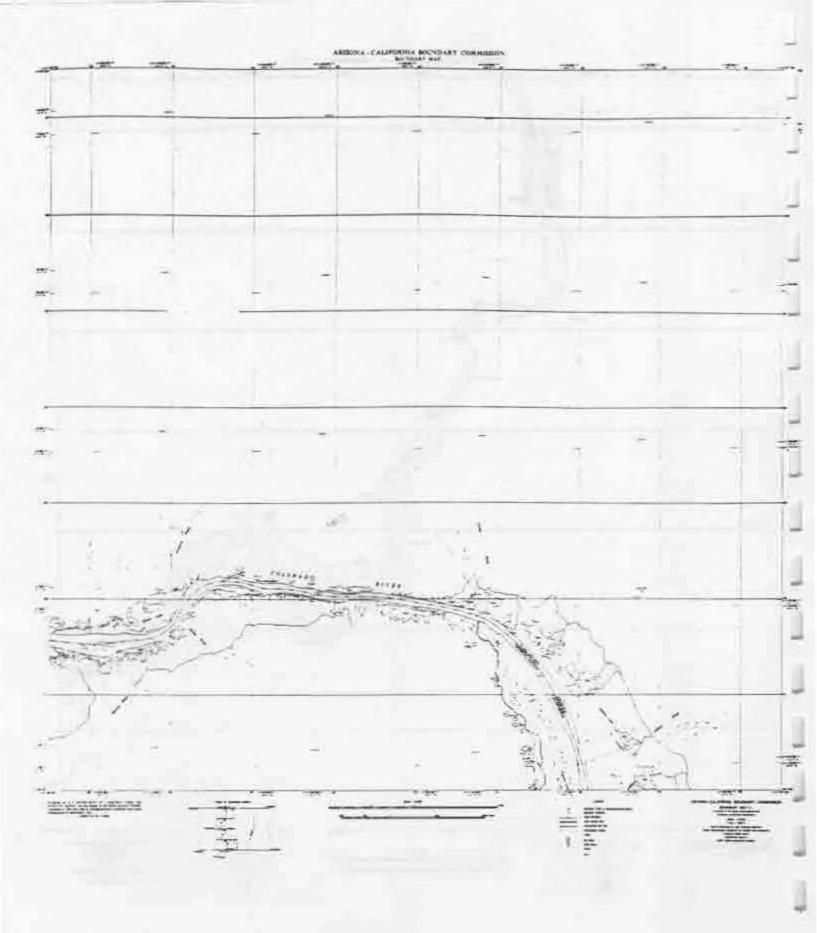


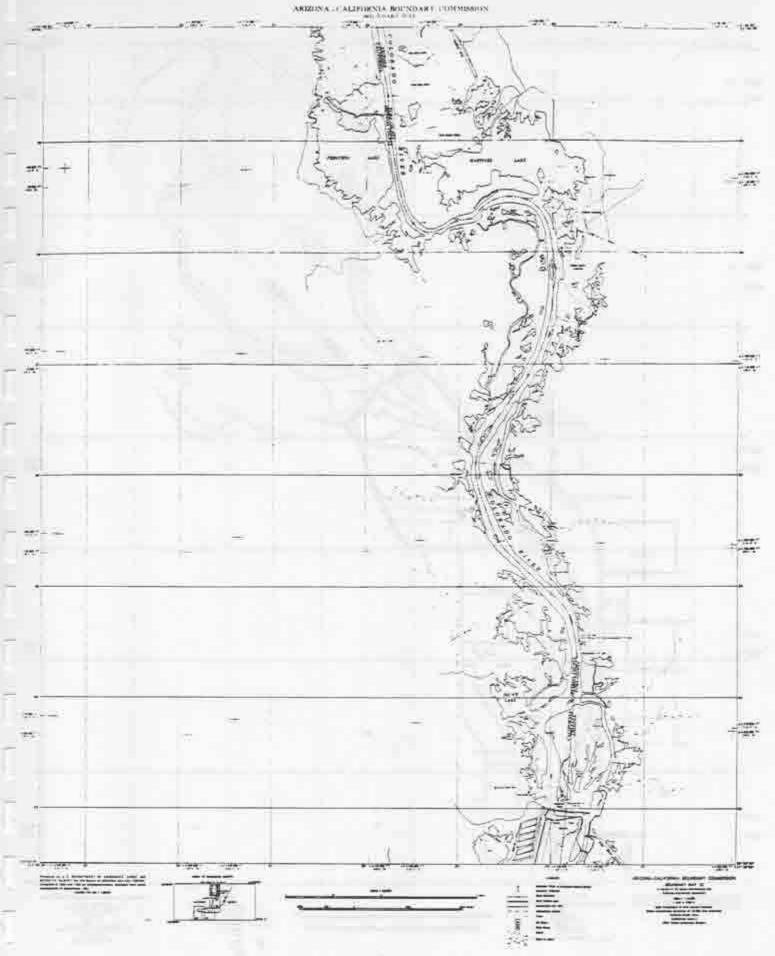


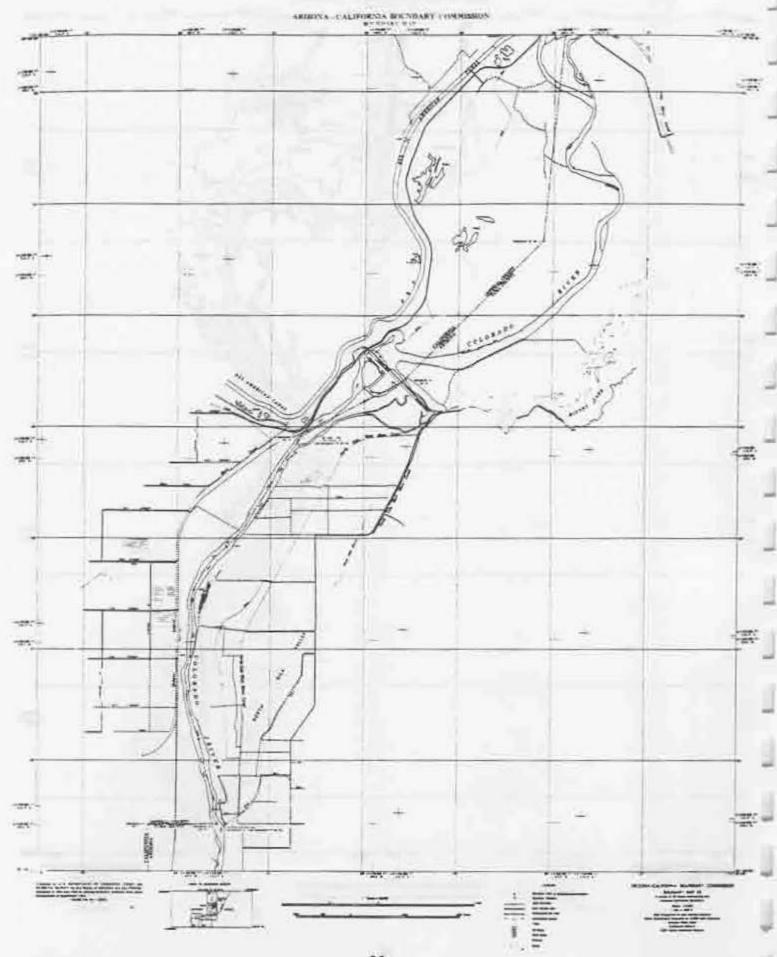


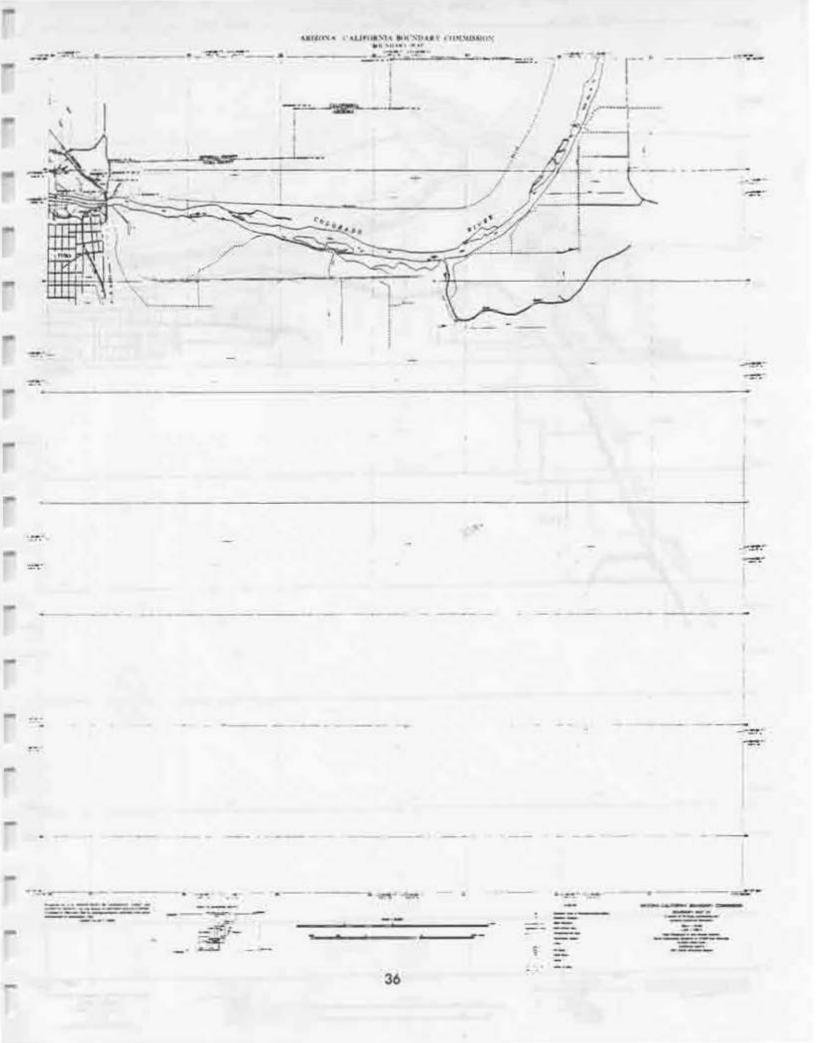


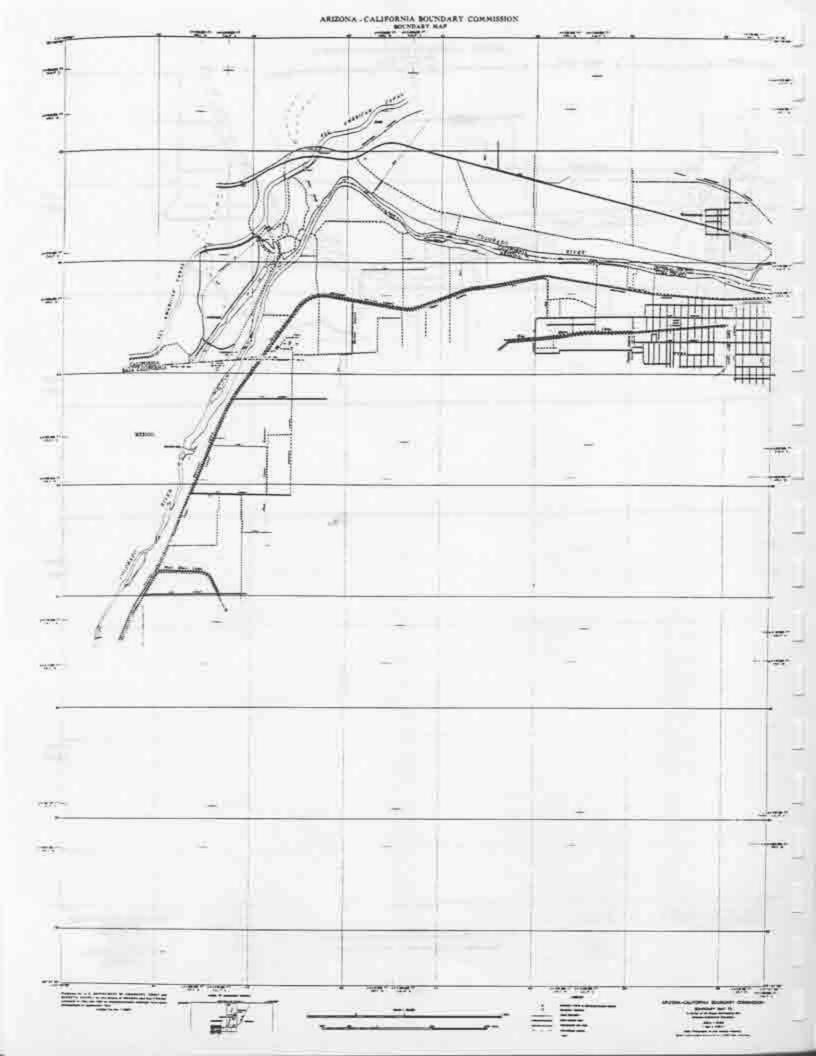












## ARIZONA-CALIFORNIA BOUNDARY COMMISSIONS

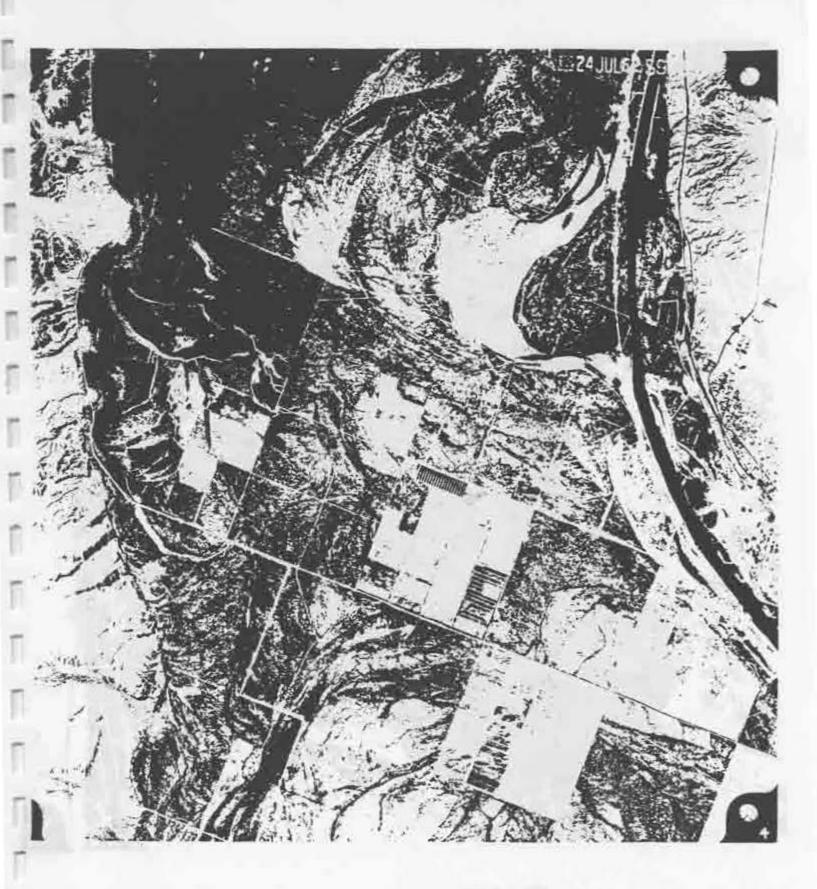
# AERIAL PHOTOGRAPHS

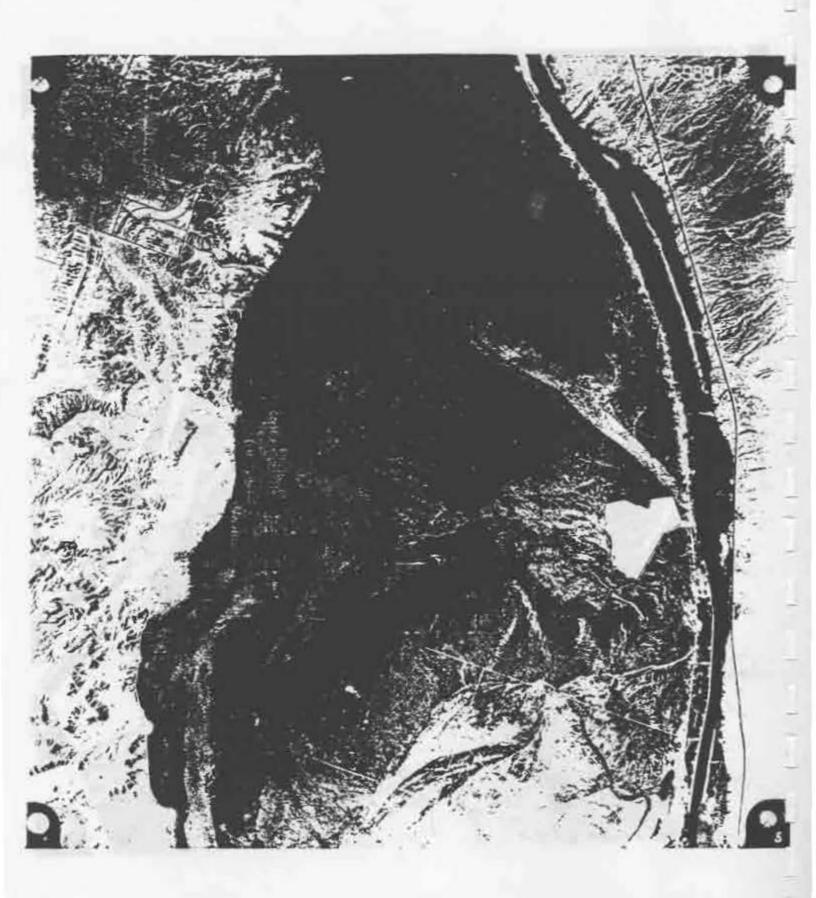
A series of 46 Aerial Photographs of the Colorado River showing the 34 Boundary Points and 215 Boundary Subpoints on the Arizona-California Boundary.



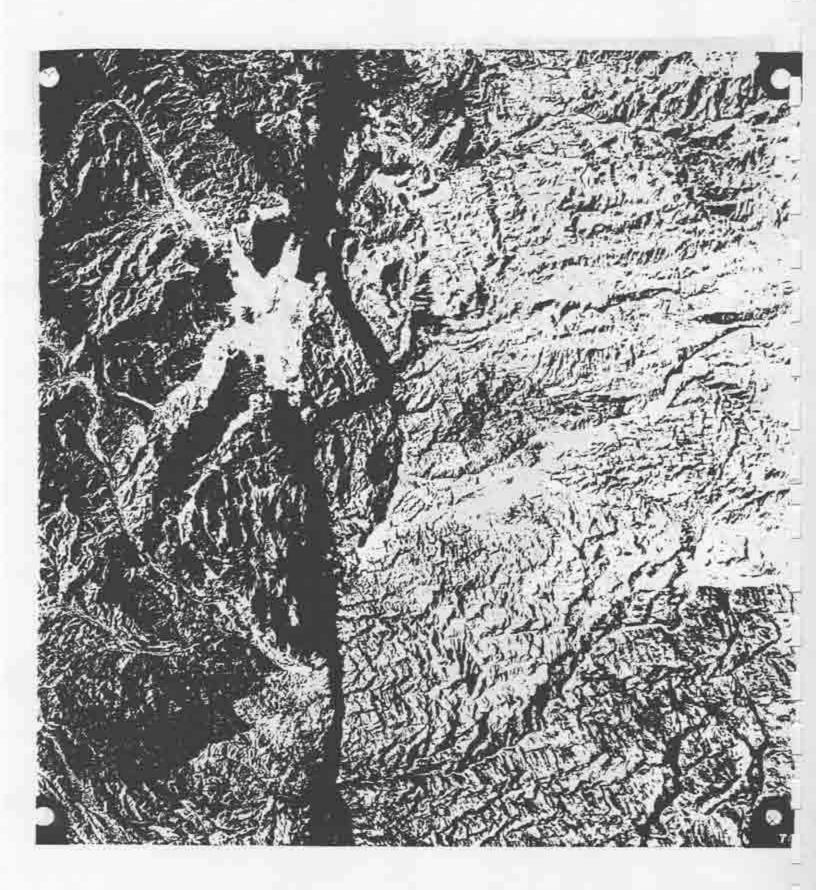


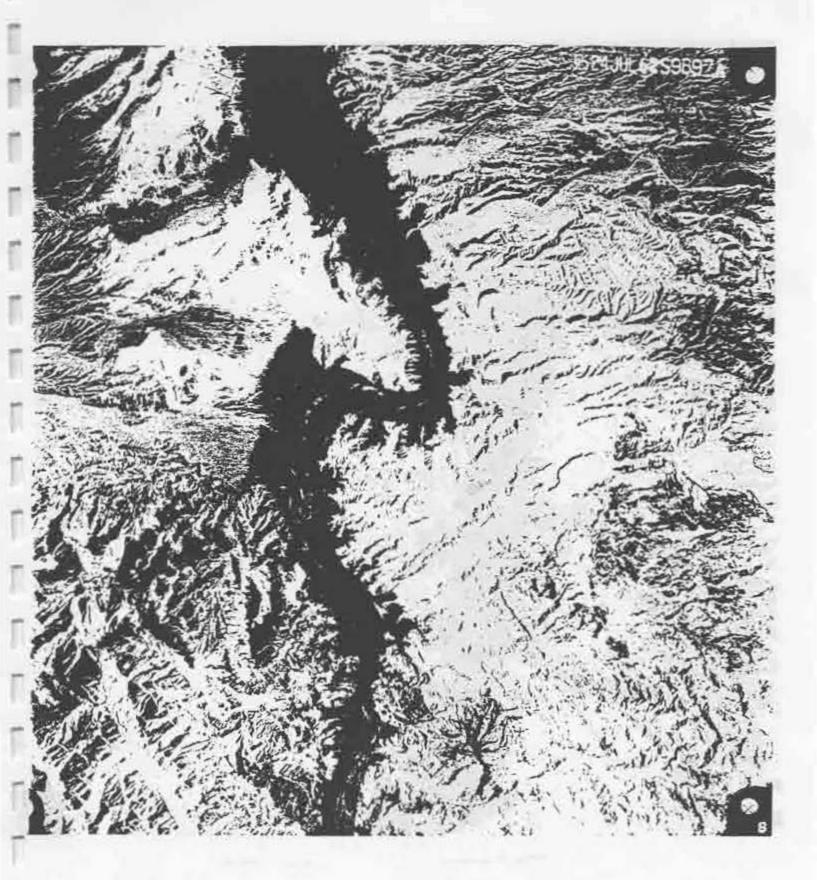






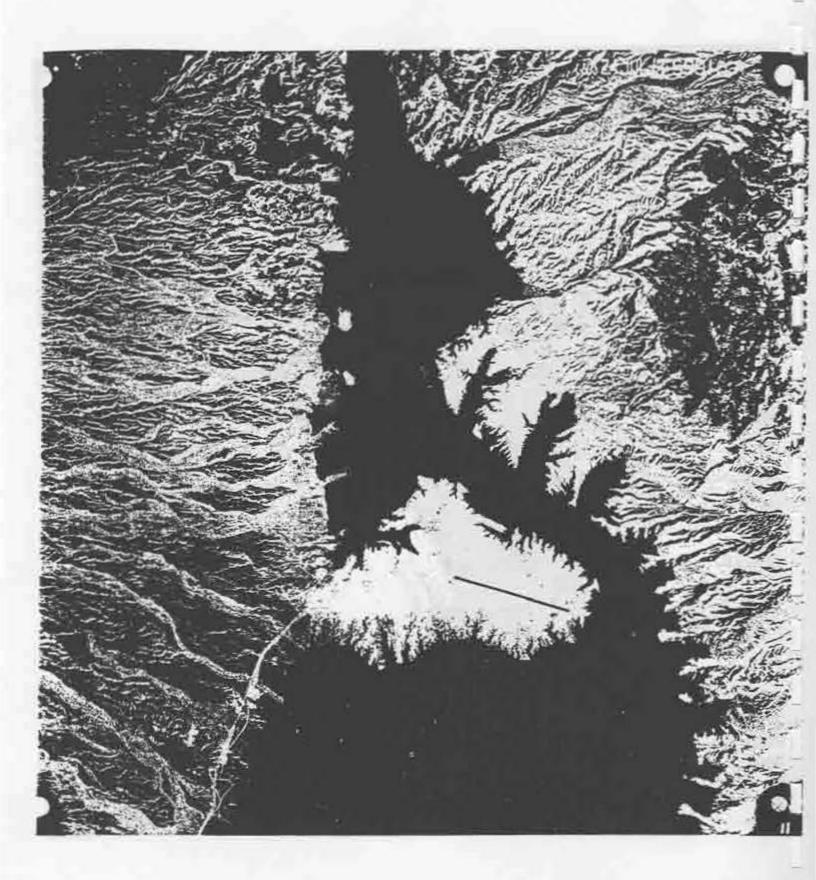


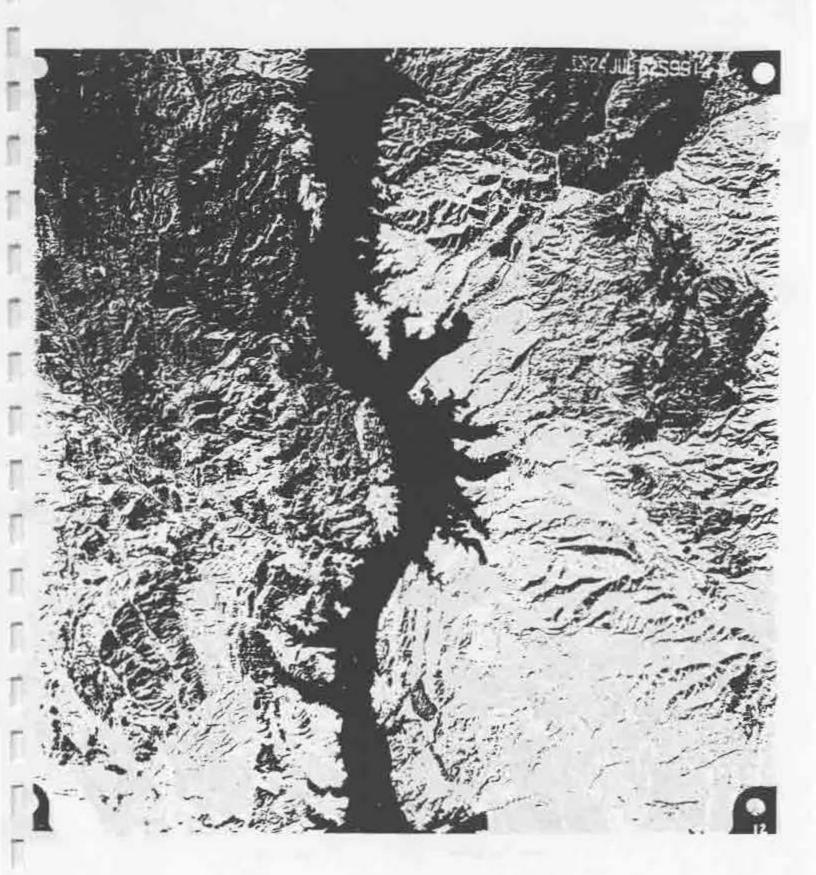


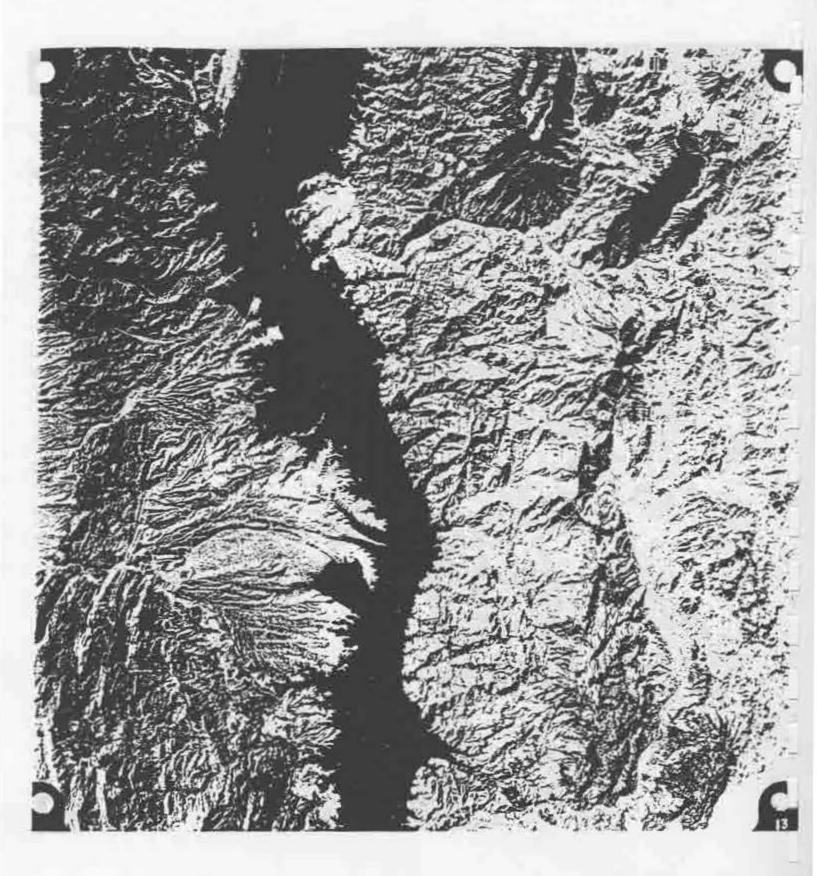




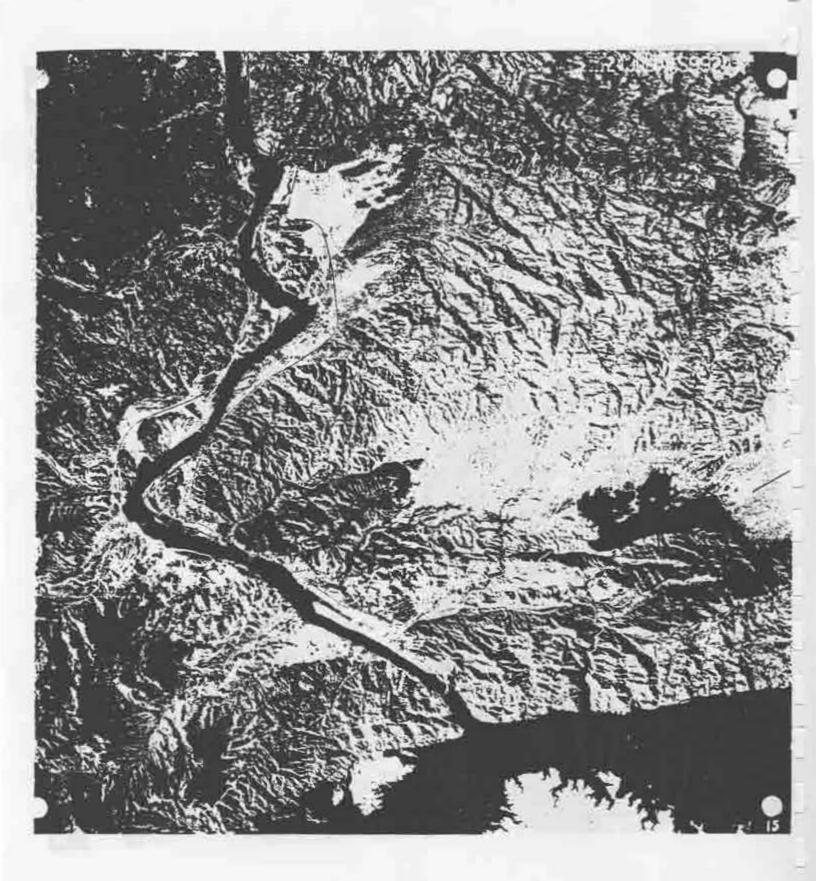


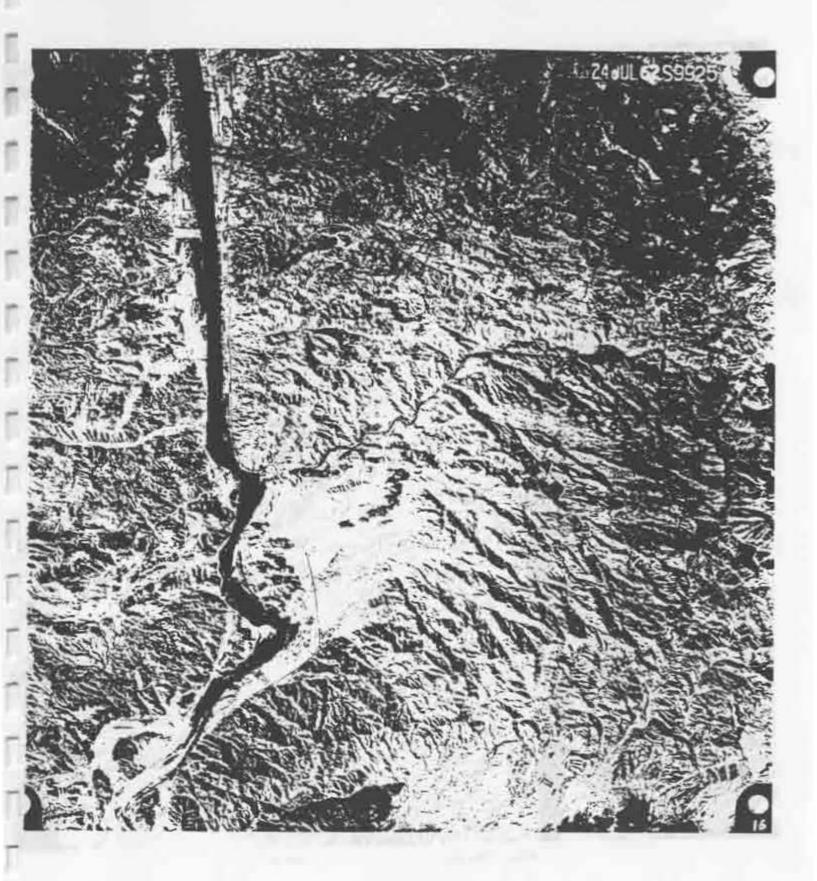


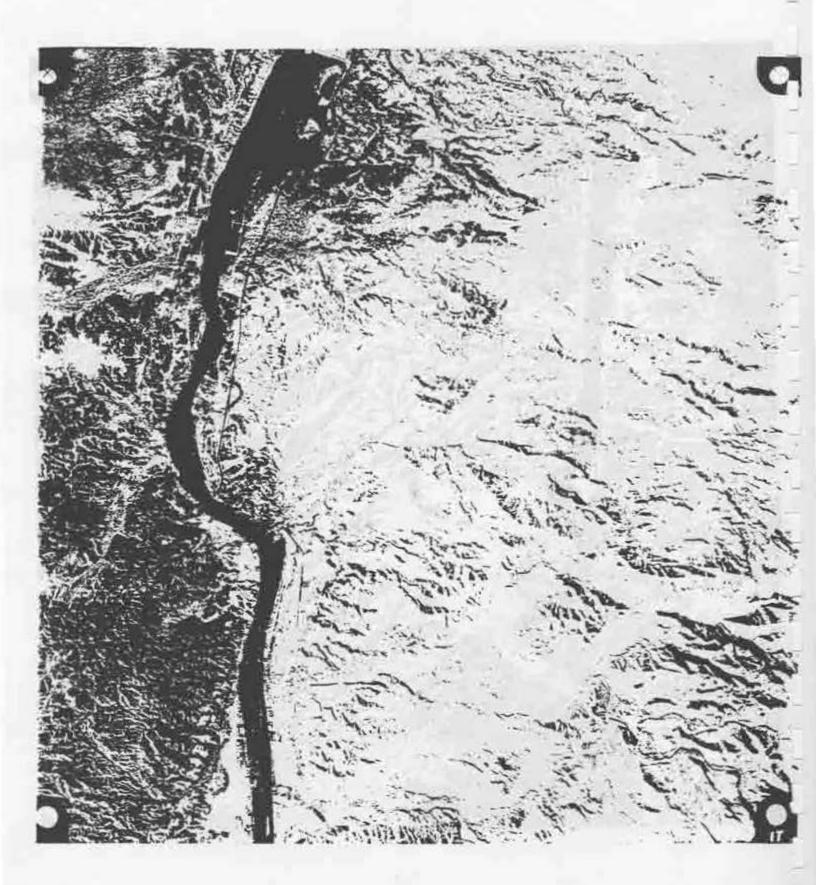










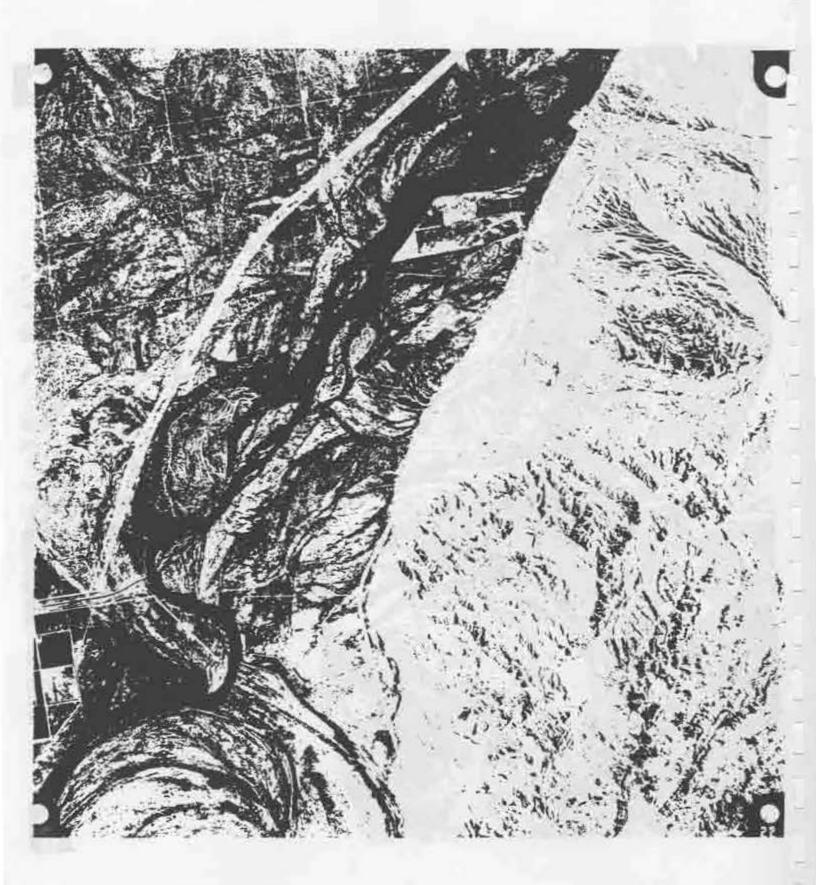


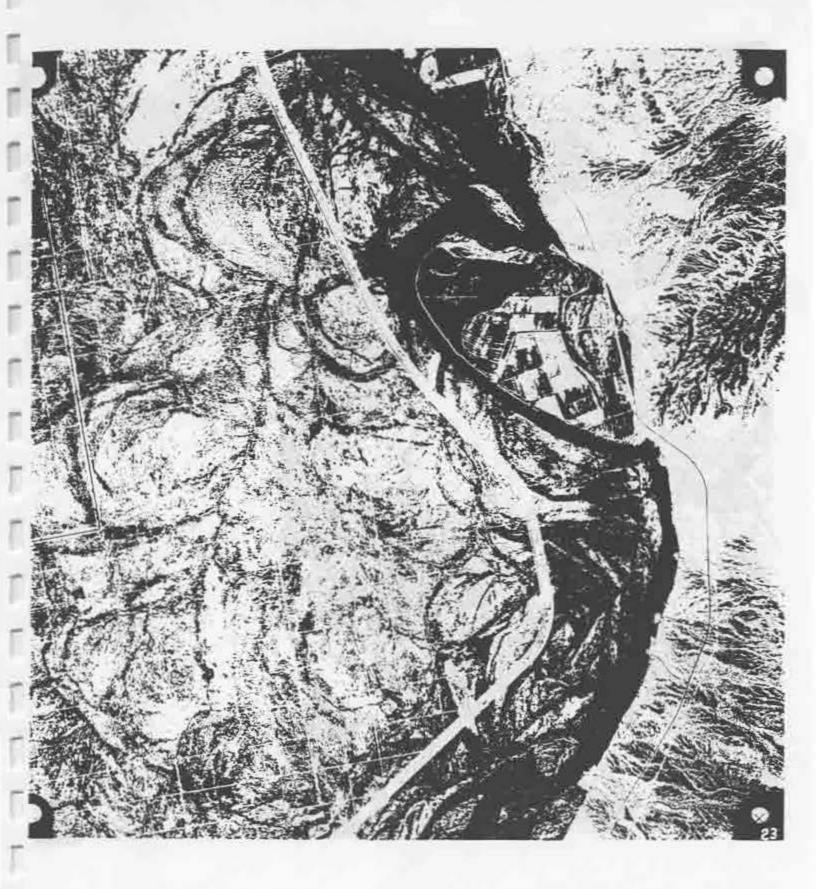




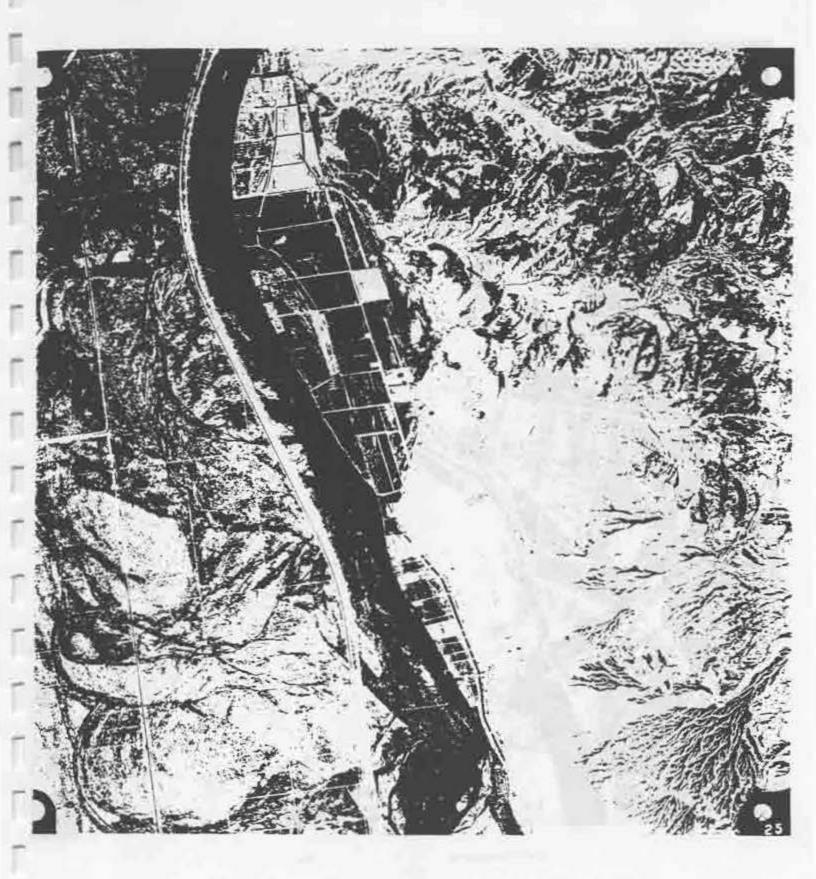










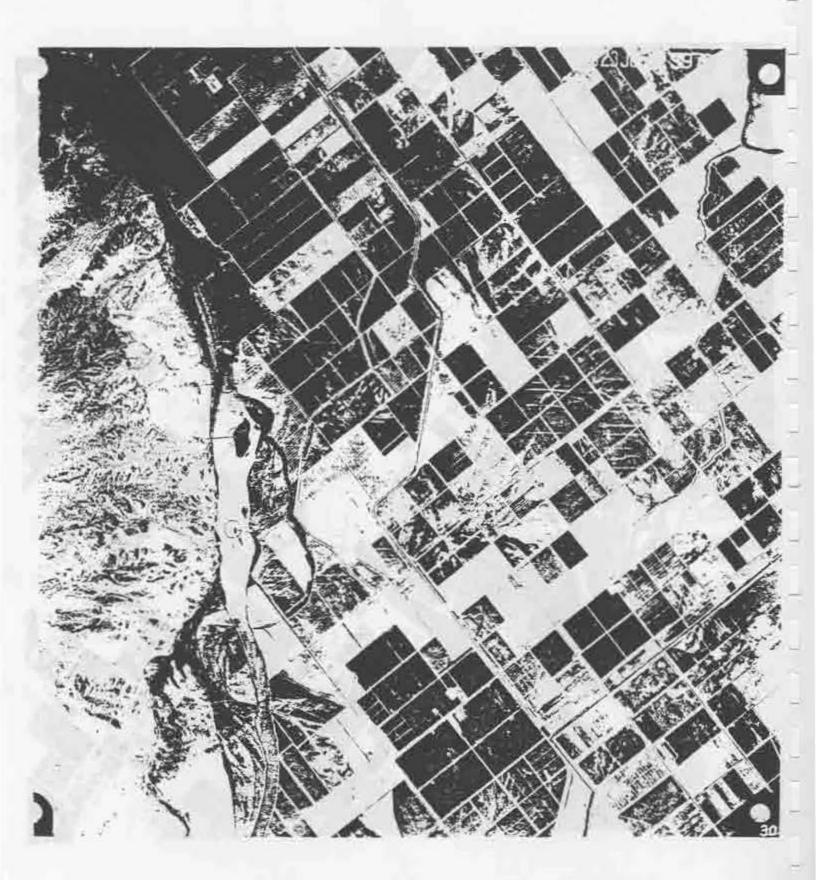




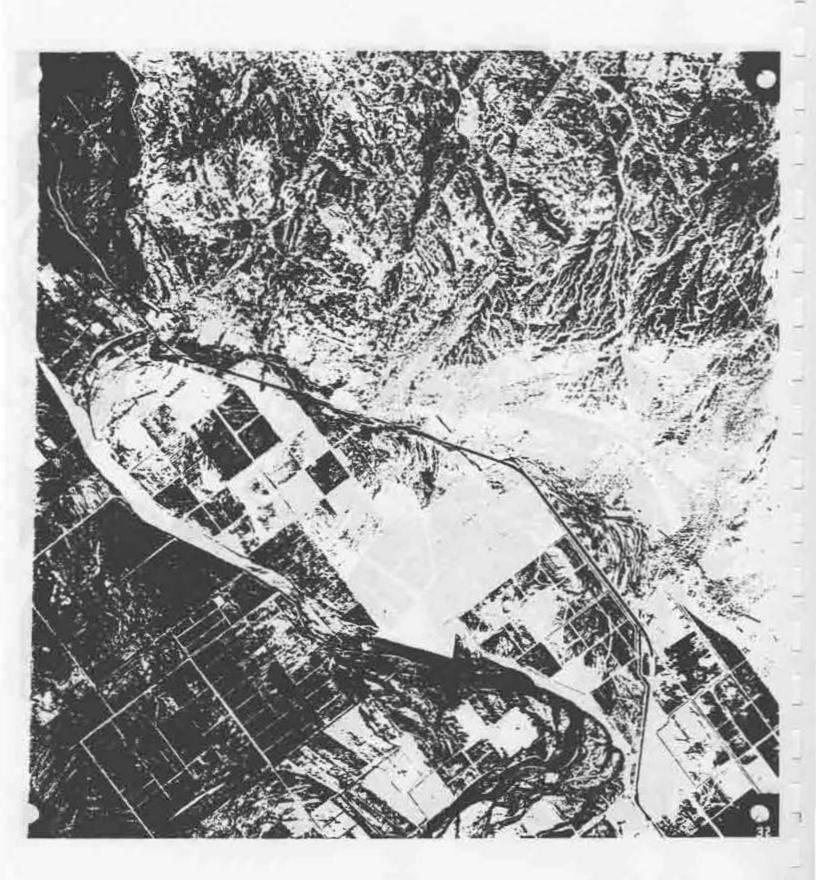


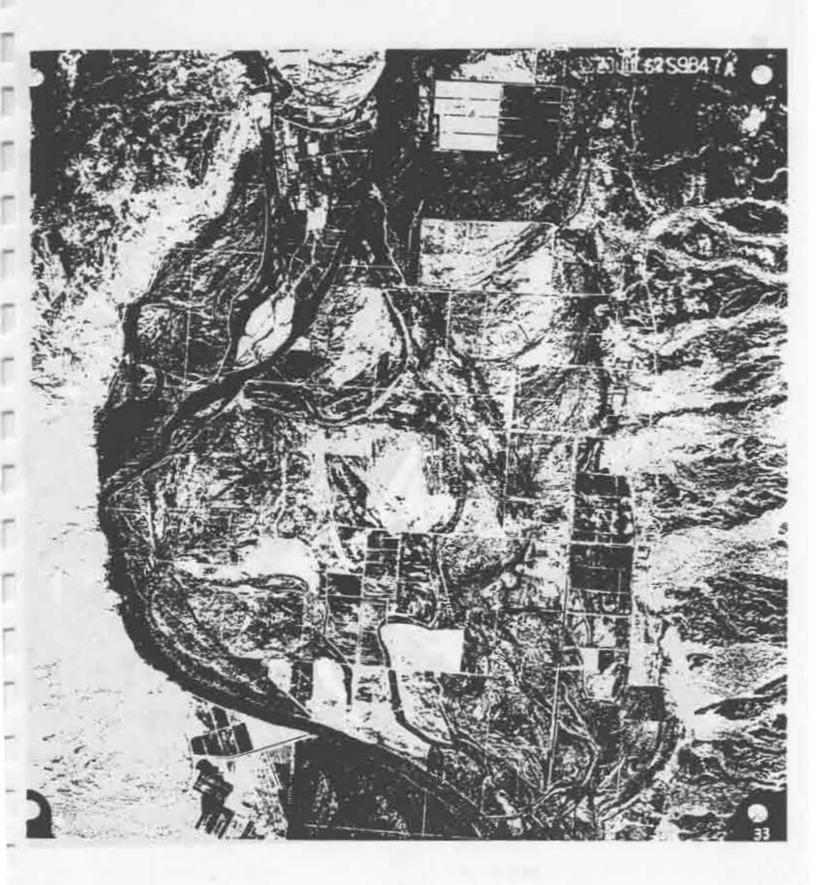


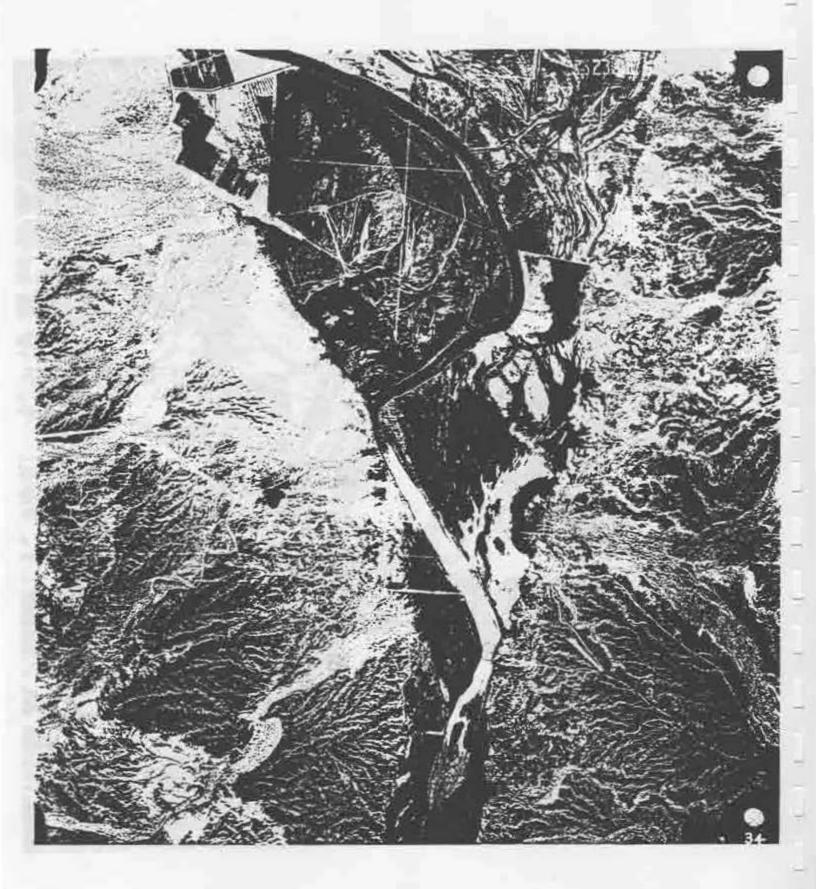




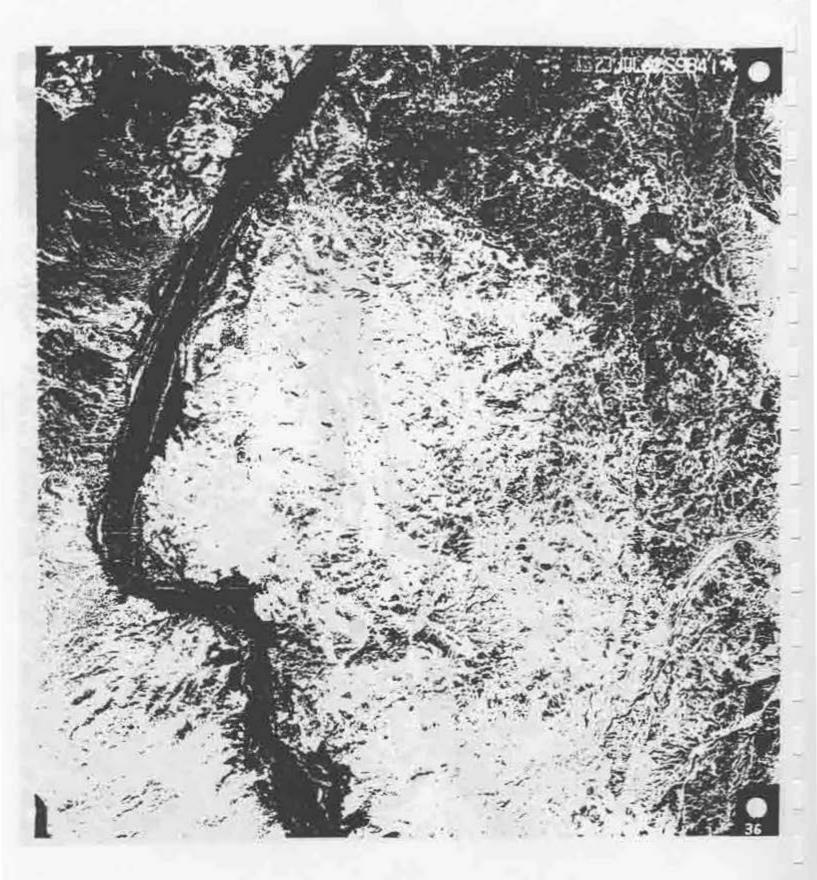


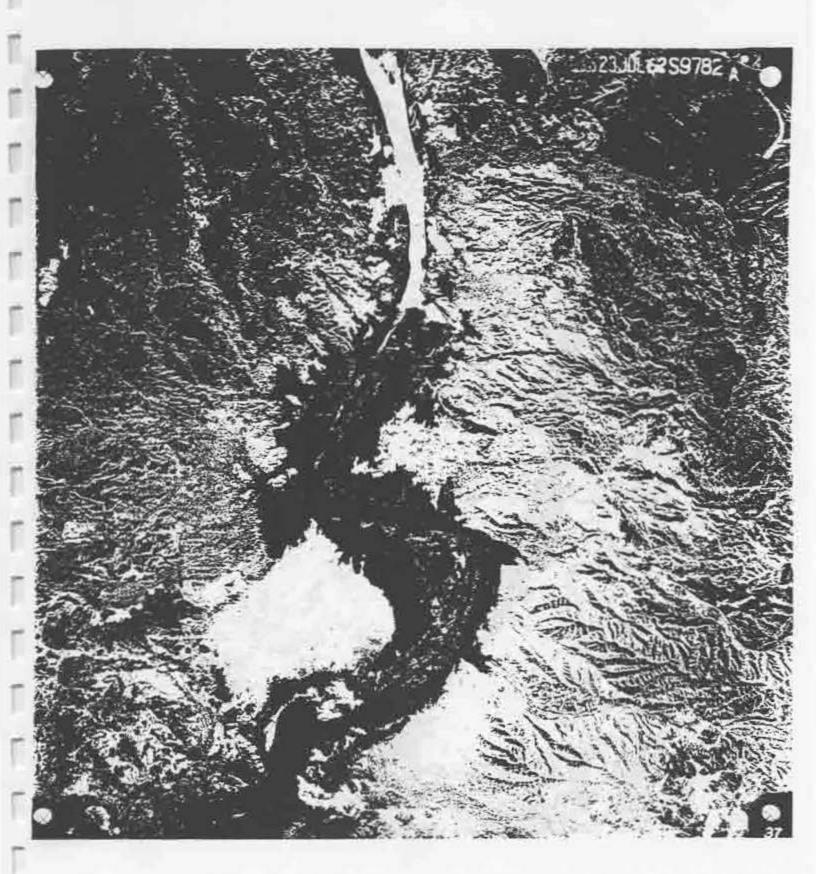




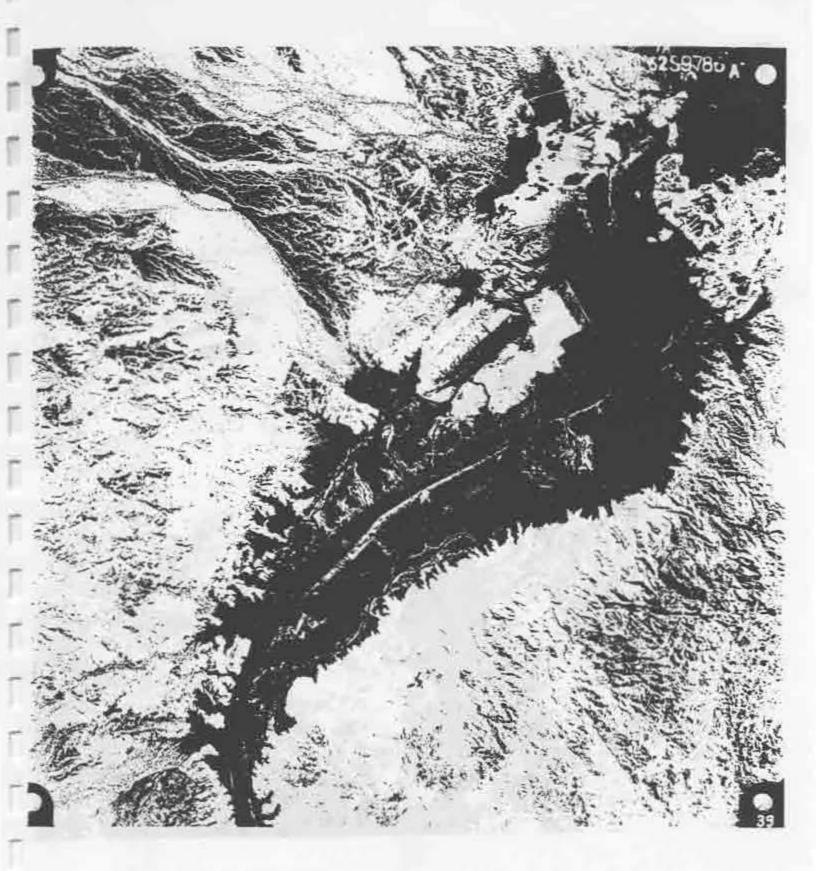


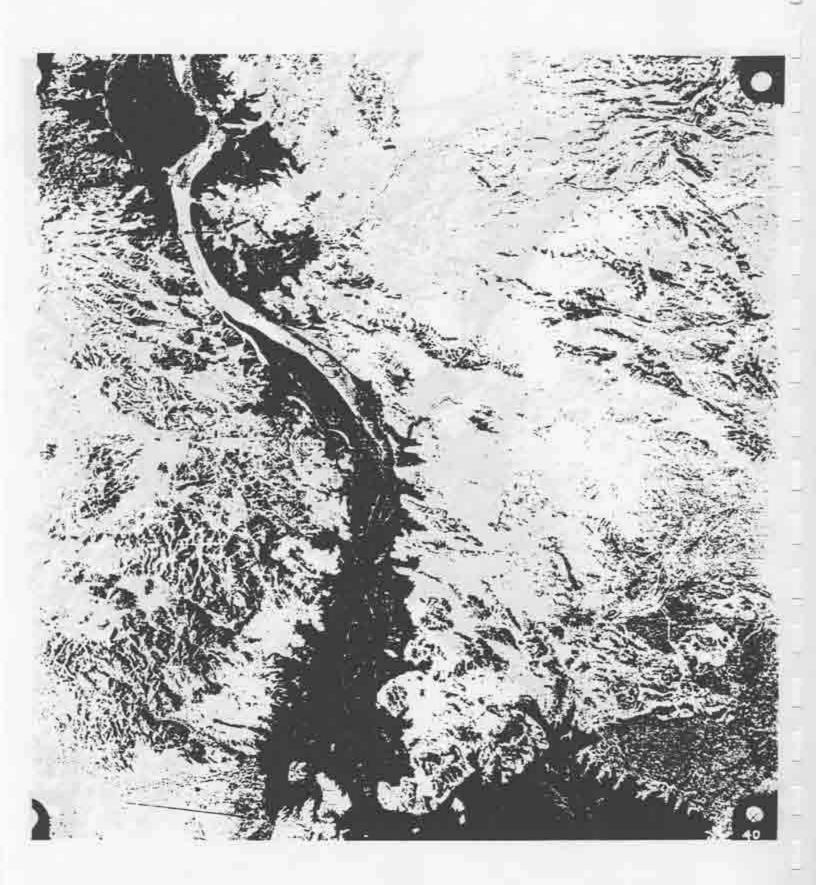


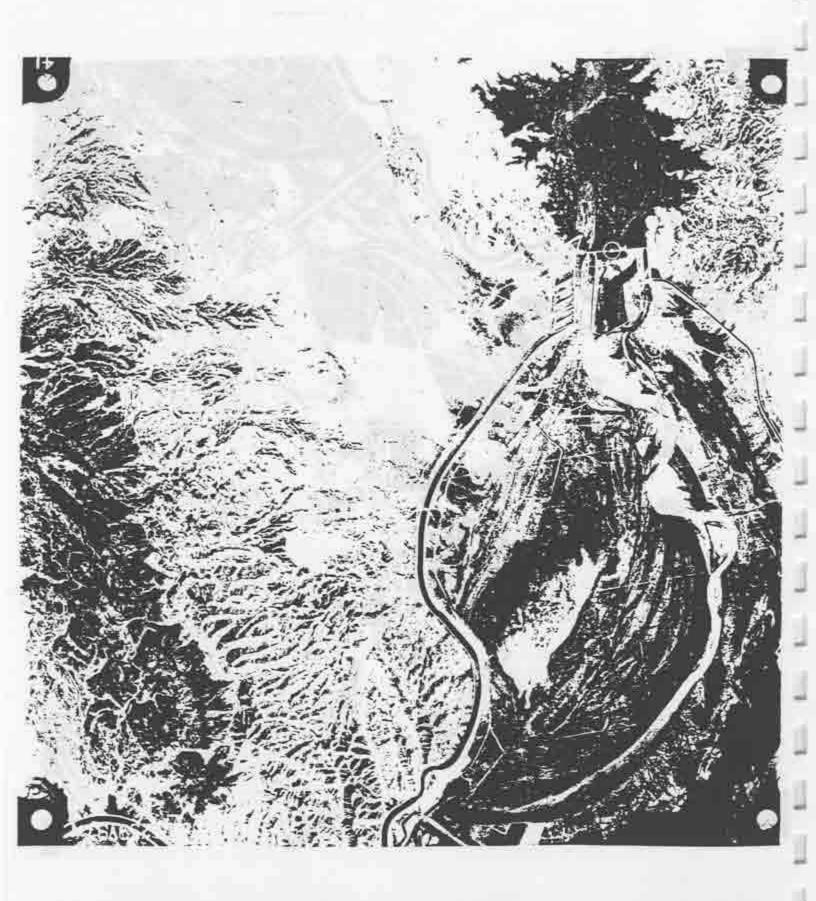






















ARIZONA-CALIFORNIA BOUNDARY COMMISSIONS

GEOGRAPHIC POSITIONS
and
PLANE COORDINATES

# Arizona-California Boundary, Reference Stations for Boundary Points not Monumented Final Geographic Positions and Plans Coordinates

Station	Code	NA 1927 Datum - Latitude	Second Order Longitude	State Plane (	Coordinates y-feet	0 or Angle
0	203	35 00 12.45882	114 38 03.31001	235184.23	1457728.62	0 30 26-1
0	2701	35 00 12.45882	114 38 03.31001	784221.48	93590.84	0 32 40.0
0	405	95 00 12.45882	114 38 03.31001	3007769.34	564010.63	1 55 06.7
1	203	35 00 00.12984	114 37 48.04945	236442.79	1456470.95	0 30 17-2
1	2701	35 00 00.12984	114 17 48.04945	785502.88	92356.51	0 32 48+6
1	405	35 00 1/0+12984	114 37 48-04945	3009079,90	562807,46	1 55 15.4
2	203	34 43 23,99286	114 29 32.46678	276926.45	1355430.62	0 25 22+3
2	405	34 43 23.99286	114 29 32.46678	3053797.17	463577.27	1 59 57+8
7	203	34 10 09.30826	114 16 01.35839	343602.04	1153368.91	0 17 25.4
7.	405	34 10 09.30826	114 16 01.35839	3128942.45	264518.01	2 07 40-2
9	203	34 10 16+61734	114 17 11-37843	337722.53	1154138.12	0 18 04.8
9	405	34 10 16-61734	114 17 11.37843	3123035.66	265038.47	2 07 00-3
10	203	34 10 00.84448	114 17 35-21757	335711.02	1152554,35	0 18 18-1
1.0	405	34 10 00.86468	114 17 35-21757	3121092.74	263371.23	2 ne 46+7
15	203	32.54 30.83248	114 27 41.36270	281636.87	695000,95	0 23 11.6
15	406	37 54 30.83248	114 27 41.36270	2548905,05	274641.06	0 58 58 1
1.7	203	32 50 38.49534	114 28 06.30594	279350.52	671534.59	0 23 22.7
17	406	32 50 38.49534	114 28 06.30594	2547180.01	251126.84	0 58 44-4
19	203	32 48 54-14162	114 30 25.84327	267370.11	661071.42	0 24 37.3
19	406	22 48 54.14142	114 30 25.84327	2535452.87	240380,55	0 57 27+8
20	203	32 45 25.84204	114 31 27-71824	261935.35	640058.43	0 25 08.4
20	406	32 45 25.84204	114 31 27.71824	2530521.19	219243.76	0 56 53.8
32	203	32 43 44.64841	114 36 54.06437	233981.80	630047,29	0 28 03.8
32	406	32 43 44.64841	114 36 56.06437	2502814.34	208568.72	0 53 54.4
34	203	32 43 07.55671	114 43 03.89804	202353.43	626571.91	0 31 23.2
34	406	32 43 07.55671	114 43 03.89804	2471278.22	204340,58	0 50 31.2

<sup>●</sup> Code 203 = Arizona West Zone Code 405 = California Zone V

Code 406 = California Zone VI Code 2701 = Nevada East Zone

Arizona-California Houndary, Final Geographic Fostions and Fishe Goordinates

			Street Commence of the Street Commence	The state of the s	Transferring Billy	THIS COOL OTHER	es .
Number Number		Code	Lat1 tude	Longitude	State Plane C	pordinates y-feet	θ or Δα Angle
100	1	203	35 00 06,43500	114 37 55.66800	235816.61	1657113.99	- 0 30 21.7
100		405	35 00 06.43500	114 37 55.66800	5008425.11	563423.29	1 55 11.0
1.00	Ŧ	2701	35 00 06.43500	114 37 55.66800	784863.01	92987+90	0 32 44-3
101	1	203	34 58 37.86770	114 37 48.88110	236300.34	1448154.91	- 0 30 16.7
101		405	34 58 37.86770	114 37 48.88110	3009289.50	554493.52	1 55 14+9
102	1	503	34 57 10.41010	114 37 54.04690	235792.47	1439316.84	- 0 30 18.5
102		405	34 57 10-41010	114:37 54:04690	3009156.10	545642.61	1 55 11-9
103	1	203	34 55 53.78900	114 37 51.86230	235906-09	1431568.99	- 0 30 16.3
103		405	34 55 53,78900	114 37 51.86230	3009597.40	537907-13	1 55 13-2
104	Ţ	203	34 54 32.12610	114 37 46.71240	236262.33	1423309.20	- 0 30 12-3
104		405	34 54 32-12610	114 37 46.71240	3010302.70	529670.57	1 55 16.1
105	Ŧ	203	34 53 40.56690	114 38 04.69600	234718.48	1418109.87	- 0 30 22.0
105		405	34 53 40.56690	114 38 04.69600	3008980.30	524411.04	1 55 05.9
106	Ť	203	34 51 00.51660	114 36 34.88990	242067.53	1402672.86	- 0 29 28.7
106		405	34 51 08-51660	114 36 34.88990	3016975.00	509300.00	1 55 57-1
107	Y	203	34 50 08.46970	114 35 09.61790	249123.79	1396542.22	- 0 28 39.3
107		405	34 50 08+46970	114 35 09+61790	3024203.60	503473.73	1 56 45.7
1.08	T	203	34 48 34-07910	114 34 28.02550	252512-53	1386971.00	- 0 28 14.4
108		4.05	34 48 34-07910	114 34 28-02550	3028073.70	494055-14	1 57 09-4
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109		405	34 47 37-98290	114 34 12.25370	3029581.50	488432.46	1.57 18+4
110	Ť	203	34 45 13.74100	11v 32 02.63510	264478.00	1366620.65	- 0 26 49-1
110		405	34 45 13.74100	114 32 02.63510	3040887.80	474230.38	1 58 32-2
111	ř	203	34 44 18,13840	114 31 02.72060	269434.49	1360960.96	- 0 26 14.3
111		405	34 44 18.13840	114 31 02. 2060	3046078.70	468785.66	1 59 06.4
200	Ť	203	34 43 26.68990	114 29 24.59080	277587.37	1355900.62	- 0 25 17.4
		122					(200 M = 200 M)

Code 203 = Arizona West Zone Code 405 = California Zone V

Code 406 = California Zone VI Code 2701 = Nevada East Zone

500	605	34 4	28.68790	110 25	24.59080	3054437.59	464074.75	2 00 02+3
300	203	74 4	9 05.96265	114 2	15.20339	278353.66	1353536+62	25 12-3
300	405	34 %	9 05.36261	114 25	15.20339	3055303.05	461745+41	2 00 07.7
400	203	16 6	19.76271	114 21	12.52097	278573.42	1352966-84	25 10.7
A00	605	14 62	59.74271	116 2	12.52097	3055546.68	461185.46	2 00 09.2
500	203	34.47	54.70264	110 25	07:06375	279444.33	1352450.93	25 04.7
500	4175	34 42	54.70265	114 25	07.04375	3056438.56	460706.86	2 00 15.2
501	203	34. 47	51.76720	116 26	27.35670	202337.61	1352092.75	24 44.9
501	9006	36 67	51.36720	114 21	27.45670	3059344.20	460471+29	2 00 35.0
502	203	14 42	16.91500	116 21	08.64100	283889.59	1350620.52	24 34+1
5.02	405	34 42	36.91500	194 28	08464100	3060956*90	459066.04	2 00 45-6
503	203	341.62	17-12330	114 28	02.48260	284389.46	1348616.04	24 30.4
503	405	34 42	2 17,12330	114 21	02,48260	3061541.00	457084.61	2 00 49+1
504	203	34 41	46.33460	116 23	57.18650	284809.50	1345500.37	24 27+1
504	405	34 41	46.33460	114 27	57.18650	3062092.30	453989.67	2 00 52.2
505	263	34 41	50+09540	114 27	25.64280	287403.45	1339796.37	24 08+5
505	405	74 40	50.09540	(10.2)	25.64280	3064924.80	448400.74	2 01 10-1
506	203	34 40	15.78900	114 27	12.33390	288490.73	1336320.46	24 00+6
506	405	34 40	15.78900	110 21	12.33390	3066157.90	444974.08	2 01 17.7
507	2.0.3	34 35	59.17780	114 24	59.69930	289551.07	1334633.72	23 53.1
507	405	34 39	59.17780	114 28	59.49930	1067288.50	443333.76	2 01 25+0
508	2031	34 39	38.89460	114 27	18-10970	287982.20	1332599+08	24 03-5
508	405	34 39	38.89460	114 27	18.10970	3065807,30	441229-79	2 01 14.4
509	203	34 39	29,35100	114 27	26.50450	287274.16	1331634.21	24 08.2
509	405	34 39	29.35100	114 27	26.50450	3065140.50	440240.92	2 01 09+6
510	203	34 38	53.02320	114 26	44.65180	290745.09	1327937.41	23 44+0

510	409	3.4	38	53.02320	114	36	114 26 64.65180	3068764.30	434694.28	2 0		2 01 33.5	
511	203	38	38	08.02660	114	2	114 26 25.70230	272466-24	1323376,58	2	m	7.18 23	
511	\$0%	34	3.8	08.02660	1114	26	114 26 25,70239	3070674.50	432210.42	2 0	1	2 01 45.4	
512	263	36	37	35,31020	114	26	20.76880	292686.76	1320067.54	2	3 2	1.60	
512	505	3.6	3.7	35,31020	1.14	26	20.76880	3671036.60	428913.94	2 0	-	2 01 47+1	
513	203	34	34 37	13,99340	114	26	114 76 14,15030	293225-17	1317908.82	2		1.65	
513	405	34	3.7	13,99340	114	36	114 26 44.15030	3071665.70	426780.00	2 0	-	2 01 50-9	
514	203	34	36	57.47800	114	2.0	114 25 49,70920	295256.59	1316225.40	~	6	23 11.7	
514	405	36	36	57.47800	114	25	114 25 49,76920	3073766-30	425183.99	2	2	2 02 04.8	
515	203	34	36	26.10410	114	25	116 25 26-64210	297347.26	1313043.66	2	N	22 57.0	
515	405	3.6	36	25,14410	114	25	114 25 24.64210	3075989.40	422093.59	2 0	2	2 02 19.2	
216	203	34	3.5	58.45010	114	25	30.76460	296800.04	1310247.57	10	3	23 00.3	
516	405	35	35	58.45010	114	25	114 25 30,76660	3675560.80	419277.04	2 0	N	2 02 15.6	
517	203	34	35	41.93690	114	26	07,17530	293744.89	1308598.73	~	m	23 20.8	
215	409	34	35	61.93696	114	26	07,17530	3072578.20	417500.72	2 0	-	2 01 54.9	
518	21)3	36	35	02196*06	114	26	114 26 01-42510	294217.82	1307445.54	~	m	17.5	
518	405	3.4	35	30,56170	116	26	114 26 01-42510	3073099*40	416368+58	2 0	-	01 58.1	
910	203	36	34	15.75090	114	24	19.53190	302687.42	1299826.34	~	OV.	6.81	
616	405	314	3.6	06054.451	114	24	114 24 19,53190	3081882.80	409114.34	2 0	TN	02 56.2	
520	203	3%	33	00.37296	114	R	114 23 34.65610	306391.64	1292182.23	N	-	21 52.7	
520	40.5	34			1114	73	114 23 34+65630	3085906-40	501633.89	2 0	0	03 21.8	
125	203	3.4	3	52.93660	114	20	52.06560	109911.57	1285342.43	2	1	0.82	
521	465	3,6	33	52.93460	114	22	114 22 52.06560	3089711.90	394949.18	2 0	6	2 03 46.1	
522	203	3.6	30	22,62660	114	22	114 22 38.78730	310965.84	1276206.33	2	-	21 19.6	
522	405	36	30	72.62660	134	12.	114.22.38.78730	3091151.00	385866*14	2 0	20	2 03 53.6	
523	203	36	28	1 29.81240	114	22	114 22 51.82030	\$09803.99	1264808.83	2	1.2	21 26.0	

523	405	34 28 29.81240	114 22 51.82030	3090471.50	174430.24	2 03 46.2
524	203	34 27 00-26740	114 22 39.28140	310797.65	1255750.33	21 18-1
524	605	34 27 00-26740	114 22 39.28140	3091846.70	365422.13	2 03 53-4
525	203	34 26 52.30460	114 21 44.55680	315375.73	1256917.33	20 47-1
525	405	34 26 52.30460	114 21 44.55680	3096455.70	364783.20	2 04 24.6
526	203	34 26 59.51300	114 21 01+51350	318984.83	1255624 . 44	20 22 . 8
526	4.05	34 26 59.51300	114 21 01-51350	3100031+60	365642.03	2 04 49 1
527	203	34 26 57.14150	114 20 00.73400	324073.47	1255354.96	19 48 4
527	405	34 26 57-14150	114 20 00.73400	3105126.90	365587.64	2 05 23.7
528	203	34 26 14.03700	114 19 30.38920	326590.00	1250983.08	19 30-8
528	405	34 26 14:03700	114 19 30-38920	3107825.70	361326.07	2 05 41-0
529	203	34 25 48.23910	174 18 25-95950	331972.17	1248345.07	18 54 - 2
529	405	34 25 48.23910	114 18 25.95950	3113314.30	358917.73	2 06 17.8
530	203	36 25 26.10610	114 17 49-04530	335052.22	1246090.86	18 33.1
530	405	34 25 26.10610	114 17 49.04530	3116486.70	356795.65	2 06 38.8
531	203	34 24 56.55260	114 17 27.95920	336802.69	1243093.89	18 21.0
531	405	34 24 56+55260	114 17 27.95920	3118362 - 10	353875.34	2.06 50+8
532	203	34 24 20.70540	114 17 12:09150	338112.89	1239463.14	18 11.7
532	465	34 24 20.70540	114 17 12:09150	3119824.40	350303.23	2 06 59.9
533	203	34 24 10.97290	114 16 37.72480	340987.34	1238464.20	17 52.3
533	405	34 24 10.97290	114 16 17.72480	3122738+40	349426.57	2 07 19.5
534	703	34 24 03.51250	114 14 67.53150	345189.32	1237688.48	17 23.8
534	405	34 24 1/3.51250	114 15 47.53150	3176969.30	348828.96	2 07 48 - 1
535	203	34 23 15.82140	114 14 53.23190	349715.63	1232844.86	16 52 - 8
535	405	34 23 15.82140	114 14 53.23190	3131696.00	344180.88	2 08 19+0
536	203	34 22 27.01050	114 13 56.33400	354460-62	1227887.70	16 20+3

536	405	3.6	22	27,01050	114	2	114 13 56.33400	3136646.00	339478.57	2 08 51.5	
37	203	36	2	53.84760	114	2	0.6286*08	356569-87	1224525.37	16 05-8	
37	403	34	2.1	53.84760	3.14	5	30.96290	3138895.30	336158.32	6.60 60 5	
3.8	203	34	2	26.86710	114	7	90.66590	364967.39	1221757.78	15 09.0	
3.8	50%	3.6	21	26.84710	114	-	50,66590	3167402.10	333747.81	2 10 03.1	
15.0	203	36	21	19,22150	114	=	114 11 05,00960	368791.78	1220970,31	14 43.2	
3.6	405	1.44	2	19,22150	11.6	=	09600*50	3151256.30	333122+54	2 10 29.1	
0.40	203	3.0	10		1.14	0	01.68440	374065.72	1212378.57	14 06.9	
40	405	3.6	1.9	54.44690	114	0	01,68440	3156888.30	324761.19	2 11 05.2	
	203	36	-	23.08830	114	80	114 08 21-19370	382457.75	1203110.16	13 09.7	
4.1	405	34	18	23.08830	114	90	21,16370	3165664.20	315655.40	2 12 02.5	
2.9	203	34	1.8	13.96660	114	90	12,18620	383209.86	1202185.21	13 04.6	
4.2	60.5	34	18	13,96660	114	90	12.18620	3166454.70	314963.03	2 12 07.6	
4.3	203	34	18		1.14	80	14.50970	383010*49	1201020.48	13 05.9	
43	405	3.6	1.8	05.4.4.00	114	8.0	14,50970	3166304.70	313790.92	2 12 06+3	
uo	203	3.6	-	47.92195	114	80	18.43732	382675.39	1199554.50	13 08.0	
0.0	405	3.6	-	89159.14	1.14	80	18.43732	3166031.79	312312,11	2 12 04.1	
11	203	36	91	51.66670	134	00	05441950	383746.36	1193861.60	13 00.3	
16	40.5	36	100	51.64470	114	80	05-41550	3167342.20	306669.45	2 12 11+5	
25	203	36	16	30.02170	114	80	09.78266	363371.63	1191677.25	13 02.7	
20	609	3.6	16	30.02170	1.14	85	09-18260	3167060.00	304471.22	2 12 09.0	
8.03	203	3.6	15	47.61220	114	10	49.23030	385078.64	1187383.84	12 50.9	
603	609	3.6	13	67.61.220	114	0.7	05.052.64	3168946.80	300253.67	2 12 20.7	
*0*	203	36	1.5	29.89270	116	0.7	56.03790	386497.18	1185594.84	12 54.6	
909	405	36	52	29.89270	1.14	0.7	114 07 56.09790	3168441.40	298441.71	2 12 16.8	
500	203	36	151	29.72480	114	80	114 08 13.01660	383077.04	1185583.23	13 04.2	

605	405	30 15 29.72480	114 08 13-01660	3167023.00	298370-16	2 12 07+1
606	203	34 15 34.43710	114 08 41.77520	380665.02	1186068.84	13 20.4
606	405	34 15 34.43710	114 08 41.77520	3164592.60	298753+48	2 11 50.8
607	203	34-15.28.19700	114 09 11-29010	378185+21	1185447.78	13 37.0
607	405	34 15 28.19700	114 09 11-29010	3162141.20	298028.28	2 11 33.9
608	203	34 15 34.46350	114 09 49.08670	375015.28	1186093.95	13 58+3
608	4.05	34 15 34.46350	114 09 49.08670	3158946×80	298540.05	2 11 12.4
609	203	34 15 04,39560	114 09 49.81240	374942.02	1183054.82	13 58-5
609	405	34 15 04.39560	114 09 49.81240	3159001.90	295500.50	2 11 12-0
610	203	34 14 55.02230	114 10 08-12840	373400 • 62	1182113-62	14 08+8
610	405	34 14 55.02230	114 10 08.12840	3157501+60	294495+08	2 11 01.5
611	203	34 14 46,39880	114 10 28.22640	371659.49	1181249.12	14 20.4
611	405	34 14 46.39880	114 10 28.82640	3155798.50	293557.83	2 10 49.7
612	203	34 14 24.76230	114 10 35.88190	371058.03	1179064.50	14 24.2
612	405	34 14 24.76230	114 10 35.88190	3155289+80	291349.75	2 10 45.7
613	203	34 14 05.71080	114 11 02.76440	368792.94	1177148-24	14 39-2
613	405	34 14 05.71080	114 11 02-76440	3153107.60	289339.56	2 10 30.4
614	203	34 13 13.71570	114 12 04.78190	363562.73	1171915.03	15 13+8
614	405	34 13 13,71570	114 12 04.78190	3148102.96	283890-19	2 09 55.0
615	523	36 12 37.46530	114 12 43+84100	360266.18	1168265.42	15 35+5
615	445	34 12 37.46530	114 12 43.84100	3144963.30	280104-64	2 09 32+8
616	203	34 12 06.32830	114 13 31+16580	356277+00	1165136-27	16 01.9
616	405	34 12 06+32830	114 13 31.16580	3141109.70	276809.88	2 09 05+8
617	2013	34 11 40.39650	114 13 26.41390	156663.94	1162513-14	15 59.0
617	409	34 11 40,39650	114 13 26.41390	3141607.00	274205.40	2 09 08.5
618	203	34 11 08.38720	114 13 53.73490	354353.71	1159288.29	16 14.2

618	405	36 11 08+38720	114 13 53.73490	3139434.90	270885+88	2 08 52.9
619	203	34 10 55.84070	114 14 28.13730	351457.53	1158033.84	16 33.4
619	405	34-10-55.84070	114 14 28.13730	3136594.20	269510+31	2 08 33.3
620	203	34 10 30.21330	114 15 04-15890	348418.57	1155458+07	16 53.5
620	405	34 10 30-21330	114 15 04-15890	3133666.60	266808.57	2 08 12+8
700	203	34 10 13,41020	114 16 05-32480	343270+67	1153785.24	17 27.7
700	405	34 10 13.41020	114 16 05.32480	3128594.00	264920.00	2 07 37.9
800	203	34 10 20-19675	114 16 28-40019	341335.53	1154481.15	17 40-7
800	405	34 10 20,19675	114 16 28.40019	3126631-00	265533.64	2 07 24.8
900	203	34 10 14.87530	114 17 10.57050	337789.49	1153961.67	18 04+3
900	405	34 10 14.87530	114 17 10.57050	3123110+00	264865+00	2 07 00-7
1000	203	34 10 00,00000	114 17 31-46000	336026.30	1152467.31	18 16+0
1000	405	34 10 00.00000	114 17 31.46000	3121411-41	263297.57	2 06 48.8
1100	203	34 09 34,34031	114 17 53.11631	334192.65	1149883.27	18 27.9
1100	405	34 09 34.34031	114 17 53-11631	3119688.40	260638.44	2 06 36+5
1101	203	34 08 23.92880	114 19 06-19160	328012-19	1142799.46	19 06+4
1101	40"	34 08 23.92880	114 19 06-19160	3113812.20	253300-14	2 05 54+8
1102	203	34 08 01.64340	114 20 18.59930	321913.07	1140581-27	19 46 48
1102	40.9	34 08 01.64340	114 20 18+59930	3107812.00	250826.63	2 05 13.6
1103	203	34 07 53.30370	114 21 15.82540	317097.65	1139766+37	20 20.9
1103	405	34 07 53.30370	114 21 15.82540	3103035.20	249809+35	2 04 40.9
11.00	503	34 07 15.38710	114 21 46.01680	314536.70	1135948.78	20 37+5
1104	605	34 07 15.38710	114 21 46.01680	3100637+50	245887.13	2 04 23-7
1105	203	34 06 53+53670	114 22 52+43170	308939.36	1133774.08	21 14-5
1105	605	34 06 53,53670	114 22 52.43170	3095136.80	243478.78	2 03 45.9
1106	203	34 06 36,46020	114 23 23.30030	306333.15	1132064+09	21 31.7

1106		405	34 06 36.46020	114 23 23.30030	3092605.00	241659.90	2 03 28 - 3
1107	T	203	34 06 42-17970	114 24 02+70680	303023.39	1132663.16	- 21 53.8
1107		405	34 56 42-17970	114 24 02-70680	3089272.90	242118-90	2 03 05-8
1108	7	203	34 06 23.16770	114 24 59.26940	298254.94	1130772-03	- 22 25.4
1108		405	34 06 23.16770	114 24 59.26940	3084588+40	240028.38	2 02 33+6
1109	7	203	34 05 31.54810	114 25 39.72220	294818.77	1125576.55	- 22 47-6
1109		405	34 05 31.54810	114 25 39.72220	3081374.30	234692.62	2 02 10-5
1110	Ť	203	34 05 11.30460	114 26 00.90920	293023.22	1123542.14	- 22 57+2
1110		405	34 05 11.30460	114 26 00.90920	3079666.10	232584.31	2 01 58.4
1111	Ť	203	34 03 55.35910	114 26 15.72310	291725.63	1115873.73	- 23 06.B
HH		405	34 03 55.35910	114 26 15.72310	3078692.90	224867-94	2 01 50.0
1112	1	203	34 02 48,20460	114 26 09.92420	292167.96	1109082.32	- 23 02.9
1112		405	34 02 48.20460	114 26 09+92420	3079421.10	218101-14	2 01 53.3
1113	1	203	34 01 21,57940	114 26 13.91260	291773.57	1100328.33	- 23 04+3
1113		405	34 01 21.57940	114 26 13+91260	3079396.00	209338-17	2 01 51.0
3114	1	203	34 01 01.74070	114 26 31.25390	290300.40	1098332.83	- 23 13.8
1114		405	34 01 01.74070	114 26 31.25390	3078008.20	207282-31	2 01 41-1
1115	Ţ	203	34 00 43.30630	114 27 47-15530	283898.35	1096513+28	- 23 56.0
1115		405	34 00 43.30630	114 27 47+15530	3071688.40	205194.55	2 00 57.9
1116	1	203	34 00 20.78990	114 27 59.64860	282830.73	1094244-62	- 24 02.8
1116		605	34 00 20.78990	114 27 59.64860	3070717+30	202882.88	2 00 50.8
3117	t	203	34 00 01.55320	114 27 32.50160	285102.70	1092284.24	- 23 47.4
107		405	34 00 01.55320	114 27 32.50160	3073069.90	201019.94	2 01 06.2
1118	Ť	203	33 59 38.09170	114 27 35.77500	284810.68	1089914.63	- 23 49.0
1118		406	33 59 38.09170	114 27 36.77500	2542601.60	669510.86	59 01.2
1119	χ	203	33 59 33,84560	114 28 01.52860	282639.25	1089500.53	- 24 03.4

58 47.1	24 16.4	58 33.9	24 35.2	58 15.2	24 56.4	57 53.9	25 23 46	57 26+8	25 39 .0	57 111.7	2000年の1000年	26 09*2	56 41-3	26 09•2 56 41•3 26 15•7	26 09-2 56 41-3 26 15-7 56 34-3	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 15-5	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 15-5 25 21-2	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 15-5 57 27-0	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 15-5 27 27-0 25 37-9	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 15-5 57 27-0 57 27-0 57 27-0 57 27-0	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 15-5 57 27-0 25 37-9 57 10-4 25 55-8	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 27-0 57 27-0 57 27-0 57 27-0 57 27-0 57 27-0 57 57-9 57 57-9	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 15-5 57 27-0 57 27-0 57 27-0 57 27-0 57 27-0 57 27-0 57 27-0 57 27-0	26 09-2 56 41-3 26 15-7 56 34-3 25 33-4 57 15-5 57 27-0 57 10-4 57 10-4 56 53-0 57 05-4
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2540440.70	280606.70	2538474.10	277712.77	2535654.50	274429+06	2532456+10	270246.57	2528356.70	267935.98	2528044.70	263234493		2521485+10	2521485+10	2521485+10 262112+56 2520505+0U	2521485+10 262112+56 2520505+0U 268393+96	2521485+10 262112+56 2520505+0U 268393+96 2526888+9U	2521485.10 262112.56 2520505.0U 268393.96 2526888.9U 270132.66	2521485.10 262112.56 2520505.0U 268393.96 2526888.9U 270132.66	2521485.10 262112.56 2520505.0U 268393.96 2526888.9U 270132.66 2528730.60 267574.41	2521485.10 262112.56 2520505.0U 268393.96 2526888.9U 270132.66 2526888.9U 270132.60 2526209.7U	2521485.10 262112.56 2520505.0U 268393.96 2526888.9U 270132.66 2528730.60 267574.41 2526209.7U 264903.93	2521485.10 262112.56 2520505.0U 2526888.9U 270132.60 2526888.9U 270132.60 2526209.7U 267574.41 264903.93 2525209.7U 264903.93	2521485.10 262112.56 2520505.0U 2526888.9U 270132.60 2528730.60 267574.41 267574.41 264903.93 2526209.7U 264903.93 2526209.7Z	2521485.10 262112.56 2520505.0U 2526888.9U 270132.66 2526888.9U 270132.66 2526209.7U 264903.93 2523548.4U 264772.72
114 28 01+52860	25.43920	25.43920	59.54470	59.54470	36,23230	38.23230	27,58930	27.58930	114 30 55.02560	55,02560	114 31 50,30570		50,30570	50,30570	50,30570 03,09240 03,09240	50.30570 03.09240 03.09240	114 31 50,30570 114 32 03,09240 114 30 03,09240 114 30 48,17290	50,30570 03,09240 03,09240 48,17290 48,17290	50,30570 03,09240 03,09240 48,17290 48,17290 27,16760	50,30570 03,09240 03,09240 48,17290 48,17290 27,16760 27,16760	\$0.30\$70 03.09240 03.09240 48.17290 27.16760 27.16760 57.38200	114 31 50,30570 114 32 03,09240 114 30 48,17290 114 30 48,17290 114 30 27,16760 114 30 57,38200 114 30 57,38200 114 31 29,17800	114 31 50.30570 114 32 03.09240 114 32 03.09240 114 30 48.17290 114 30 48.17290 114 30 57.16760 114 30 57.38200 114 30 57.38200 114 31 29.17800	50,30570 03,09240 03,09240 03,09240 48,17290 27,16760 27,16760 57,38200 57,38200 29,17800	114 31 50.30570 114 32 03.09240 114 32 03.09240 114 30 68.17290 114 30 48.17290 114 30 57.16760 114 30 57.38200 114 30 57.38200 114 30 57.38200 114 31 29.17800 114 31 06.60710
28	28	2.8	2.8	2.8	5.0	5.6	30.	30	30	30	3.1	10	2.5	32	32 32	32 32	32 32 32 36 36	32 32 32 32 32 32 32 32 32 32 32 32 32 3	25 25 25 25 25 25 25 25 25 25 25 25 25 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2	32 32 32 32 32 32 32 32 32 32 32 32 32 3			
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20	10		63.00250	13.6	3	20.51120	2529434.10	627322.24		15	57 30.7
52	25		28.65986	114	2	09.49880	271548.50	1046539401	1	52	10.3
8	26		28,05980	114	8	114 30 09-49880	2530387+80	625827.54		25	57 36.7
3	3		0.07.05.00	11.4	2	114 30 03-16410	271556+37	1043758+87	1,911	52	8.60
3			00.55740	134	36	09-16410	2530462.60	623044.38		2.5	57 36.9
3			45.47930	114	30	28.54056	269911.61	1042297.32	К	52	50.4
3			02-626 *GV	1	2	28.54050	2528853.50	621597.66		57	57 26.3
7			29.56820	7	30	09501.46	267827473	1040653.83	E	25	25 33.9
3		2.4	29.55820	71.	3	94.10560	2526809.80	619854.46		5.1	12.8
0		200	06088*99	1	-	31,23500	264616+22	1041214.88	1	25	25 55.2
7		100	34.88050	116	FP.	31.23500	2523585.70	620338.03		36	8116
7		2	01640.00	2	=	052230	263364.45	1038374.19	1	36	03.0
5	51 0	3	01.685.4	114	=	45.82220	2522402,70	617468,02		96	N3.8
36	90 0	31	94008-8	1.	3.	22,35390	265299*80	1032508.31	s <sup>t</sup>	52	6.64
5	90	100	040,840.00	1)4	7.6	22.35390	2524478,70	611650.44		4.6	56 56.7
2	2 44		27.28.10,	÷	**	09.58920	266345+19	1028303.75	A.	52	25 41.7
2 69 86	2 69	14	27.28370	1	33	114 31 09,58920	2525625.00	6.07A72+30		51	03.7
6.50	40 0	3	90691-8	114	=	16.82400	265551-74	1026395,68	Ť	25	1.94
0.4	0 64	2	106.48 -B	114	*	18-82400	2524877.70	60565659		5.6	98.96
85	8 89	47	SSAMBAD	114	7	17, 12360	263981.04	1025103.26	ř	25	25 56*8
24	48.3	20	3444646	- 2	7	37.37360	2523338+60	604215+82		26	56 48+5
1.9		-4	8.74.1189E	1.6	1	04.46320	266702+15	10.6175.97	×	52	25 37.8
7		-	47.1189E	ř	7	04.46320	2526225.60.	597356.11		57	6.90 72
9			16.25,700	110	30	14.49950	270821.98	1004918.02	. 1	52	9*00 52
			16.25200	114	10	114 to 16.69950	2530663.20	584201-27		15	34.0
4.4	44	-	05.44.270	1	3	114 30 41.04670	268513,59	995855.75	9	25	25, 27+3

1145		406	33 64 06.44270	114 30 41.04670	2520573.50	575086.21		57 19.4
1200	(1)	203	33 43 58-11276	116 30 36.04467	268929.84	995017.66	-	25 19.4
1200		AU6	33 43 58.11276	110 30 36:04447	2529009.94	574251.40		57 22.2
1201	1	203	33 41 17,21929	114 29 46.88310	273048.26	990341.55	=	24 51+6
1201		406	93 49 12-21920	114 29 40.88310	2533239.40	569682.75		57 49+2
1202	1	203	33 41 56-77570	114 29 44.51980	273192.80	982714.49	- 4	24 49.5
1202		406	33 41 56.77570	114 29 44.51980	2533567+30	562061-51		57 50-5
1203	7	203	33 41 32,38680	114 30 24.28190	269815.28	989273.78	-	25 11-3
1203		406	33 4) 32.38680	114 30 24.28190	2530249+50	559540.33		57 28+6
1204	τ.	203	33 41 09+55740	114 31 23.43260	264800.03	978003.27	-	25 43.9
1204		406	33 41 09.55740	114 31 23.43260	2525290.40	557149.96		56 56 1
1265	1	203	33 40 36.13440	114 31 48.82970	262628.41	974641.11	-	25 57.6
1205		400	33 40 36.13440	114 31 49.82970	2523200.30	553736.63		56 42+2
1206	T.	203	23 40 01.31230	114 31 48.63810	262619.56	971324-14	*	25 57+1
1206		406	33 40 03.31930	114 31 48.63810	2523271.20	550420.50		56 42+3
1207	T	203	33 39 32.60410	114 30 47.92950	267121.72	968181.24	-	25 23+1
1207		606	33 39 32.60610	114 30 47.92950	2528453.30	567401.38		57 15.6
1208	T.	203	23 39 71.505HU	114 31 30.73590	264100.95	967086.39	-	25 46.7
1208		406	33 39 21.59586	11+ 31 20,73590	2524854.00	546219.70		56 52+1
1209	1	203	13 39 13:93110	114 31 51.49340	262340.51	966333.97	-	25 58+1
1209		406	33 39 13,93110	114 31 51.49360	2523112.20	545425+20		56.40-7
1210	1	20.3	73 39 62.22306	114 11 >8.56370	261752+18	965155.09		26 01+9
1210		506	23 39 02+22300	110 31 58-58370	2522532.40	544232.07		56 36.8
1211	7	253	33 38 40.72130	114 31 45-05480	262859.49	962973.13	-	25.54+2
1211		406	33 38 40+72130	114 31 45.05480	2523711.80	542077.91		56 44.2
1212	1	203	99 38 17-21560	114 31 24.02280	264619+82	960583.92		25 42.3

1212		406	33 38 17-21560	114 31 24.02280	2525529.00	539731.76		56 55.8
1213	. 1	203	33 37 50.54480	114 31 31.40640	263975.34	957892.81	-	25 46+1
1213		406	33 37 50.54480	114 31 31+40640	2524949.40	537026.02		56 51.7
1214	Ţ	203	33 37 45.61930	114 31 47-02430	262650.99	957404.89	140	25 54+6
1214		406	33 37 65.61930	114 31 47-02430	2521617-20	536506.41		56 43.1
1215	Ť	203	33 37 30+39850	114 31 49.82110	262396.98	955868.26	4	25 56 - 1
1215		0406	73 37 30.19850	114 11 49.89110	2523420.20	534964.18		56 41.6
1216	.7	203	33 37 12.28410	114 31 40.33620	269191.19	954031.24	-	25 00.6
1216		2406	33 37 12.28410	114 31 40.33620	2524258+30	533146.83		56 46+8
1217	3	203	33 36 67.09550	114 31 16,95620	265149.38	951470.48	-	25 37+3
1217		406	33 36 47-09550	114 31 16.95620	2526277.40	530633.94		56 59.7
1218	7	203	33 36 37.79920	114 31 20.38290	264852+56	950533.01		25 39.1
1218		406	33 36 37.79920	114 31 20.38290	2526003.20	529689.65		56 57.8
1300	1	203	39 36 17.31038	114 31 48.52488	262456.82	948479.94	-	25 54+5
1300		406	33 36 17.31038	114 31 48,52488	2523657.56	527579.67		56 42+3
1301	1	203	33 35 45.45536	114 32 09.98750	260617-03	945273.90	-	26 06+0
1301		405	33 35 45.45530	114 32 09498750	2521895.40	524330.44		56 30+5
1302	7	203	33 35 14.37820	114 32 21.72730	259600+02	942140.32	in.	26 12-1
1302		406	33 35 14.97820	114 32 21.72730	2520954.00	521173.44		56 24 - 1
1303	1	201	13 34 47.93800	114 32 21.71360	259580+81	939467.85		26 11.8
1303		406	33 34 47.93800	114 32 21.71360	2520999+00	518501.38		56 24+1
1304	7	503	13 34 14.81510	114 32 09.50750	260588-11	936112.09		26 04.7
1304		406	33 34 14.81510	114 32 09.50750	2522086.60	515170.92		56 30*8
1305	1	503	33 35 43.98420	114 31 52.28060	262022.27	932984.83	4	25 54+8
1305		406	33 33 43.98420	114 31 52.28060	2523595.40	512079.13		56 40+3
1306	1	203	33-33-12,45770	114 31 24.98460	264308.35	929780.96	4	25 39.4

1306		909	3.8	33	12,45770	11.0	=	24.98460	2525957.70	508931.21		56.5	5+3
1301	-	502	3.3	33	025.27600	117	3	114 34 42.69710	262801.66	928773-18	1	25 4	0-6
1303		406	9.3	3.3	02.37600	114	11	42.69710	2524475.70	507887.55		9.99	9.9
1308	÷	203	13		52.01290	110	7	50,66870	262119.86	927827.84	X.	25 53.3	3.3
1308		909	33		92,97290	114	4	116 H SU-66870	2523816.80	506926.15		56 41.1	1.1
1300		823	3.3		08686*20	114	-	10.020.00	255366.16	923261.12	ł	26:36	2.4
1300		406	66		08692*10	114	8.8	14,4439913	2517175,20	502198.74		55 5745	5.45
1310	+	203	3.3		49.24730	110	2	31.74160	253515.10	921452.36	ž	26 48	8+5
1310		909	17		44.24730	114	2	91.74160	2515358.00	500346-12		55.45	9.6
1341	+	2013	0		25.5906.0	114	7	35.HT369	253150.02	919063.95		26 50	9+0
1311		944	113		29.45040	134	*	05.83160	2515060-40	497949.74		4 25	3.4
1312	+	2013	313		02.44840	116	1	15,45120	253130.43	916745-11	1.	2.05 92	2.0
1115		91.0	13		97.46484u	11.6	-	35.95120	2515096.50	495631.19		55.4	3+3
1313	÷	203	13	2	50.222.10	114	7	67,13920	252147.94	915496.79	,	26.5	4.4
1313		9.4	13			1.14	#C	47,33920	2514146.30	694359,69		55 37.0	0.7
1114	*	5113	3.9			114	4	114 34 50.67410	245762.24	912652.60	ŧ	27 31.0	1.0
1114		4.46	2			1.14	34	25.674)0	25URR28.7U	491387.14		95 0	2.5
1.115	-	202	13			11%	2	18.10490	242712.06	908524.69	1	7.96 75	1.09
1,115		40.6	11			11	2	18, 10490	2504879.00	487163.38		54.3	2.9
1316	+	21.3	3.3			17	2	15.85690	219461.46	902472.51	1	28 16.8	8 . 8
1116		4116	3.3			114	4	15.49690	2501774.80	481035-21		5.4 1	5.4
1314	-	2013	*			1.14	10	42.01650	211221.03	899824.29	ŧ	28 3	8.0
1411		4116	1.3			114	1	47.01494	2499604.74	478336+27		54.0	1.0
1116	÷	5 3	13			17.	31,	55.21910	236763*119	898057.06	ŕ	28 36*8	8 * 9
1118		9.10	13		\$6.47763	3.14	2	57.71910	2490003.50	476566.90		53 54.9	6.9
1319	dia.	5.3	3.5	50		174	1.4	114, 17, 17,95820	214114.85	691828.96	+	28.69.12	1.0

1319	406	33 26 54.62830	114 37 17.95820	2496685.50	470267.00	93 41.3
1320	203	33 25 15.85180	114 38 10.92770	229541*40	001003.10	29 17.6
1320	406	33 25 15.85180	114 38 10.92770	2492352.30	460214.93	53 12+2
1400	203	93 24 46.54852	114 39 24.79576	223254,41	878975.36	29 52.9
1400	406	33 24 46.54852	114 39 24.79576	2486137+29	457157.28	52 31.6
1401	203	33 25 02-45130	114 40 12.60470	219215.90	880618.30	30 24-5
1401	406	33 25 02.45130	114 40 12.60470	2482060.80	458702.75	52 05+3
1402	203	33 25 04.30910	114 40 35.45590	217263+63	880823.42	30 37.2
1407	406	17 25 04.30910	114 60 35.65590	2480104.30	45886C.96	51 52.7
1403	203	13 25 04.46000	114 41 06.20210	214674.52	RBOR61.85	30 54.0
1403	406	33 25 04.46000	114 41 06.20210	2477515+20	458837.23	51 35.9
1404	203	33 24 59.84790	114 41 28.68240	212764.76	880412.87	31 06.3
1404	4116	13 24 59,84790	114 41 28.68240	2475616.90	458342.60	51 23.5
1405	203	33 74 34.24500	114 41 57-35940	210310+31	877847.16	31 21.8
1405	406	33.24 34.24500	114 01 57.35940	2473224.90	455718.92	51 07.8
1406	201	13 24 26.77130	114 62 28.55940	207658.40	877110.95	31 38.9
1406	906	11 24 26.72130	114 42 28.55940	2470591.60	454919.36	50 50.6
1407	203	33 24 29-51590	114 61 13.13690	203882.19	877428.43	32 03.4
1407	606	13 24 29.51590	114 67 13.13490	2466809+10	455146+11	50 26+1
140H	203	13 54 18 01410	114 41 28.74080	202546+25	876278+25	32 11-9
1408	406	13:24 18:01410	114 AT 28.74080	2465503.30	453964.35	50 17-5
1409	203	33 23 64 028B0	314 43 09.31820	204162+86	872827.83	32 00+7
1409	406	33 23 44.02880	114 43 09:31820	2467200+10	450553:95	50 28+2
1410	203	33 23 02.93000	114 42 27.47250	207672.61	868640.96	31 37-1
1410	406	33 23 02.93000	114 42 27-47250	2470809.00	446452.78	50 51 • 2
1411	203	33 21 39.22520	114 41 53.39260	210485.49	860154.15	31 17-2

1411		406	33 21 39.22520	114 41 53.39260	7473824+40	438036-53	51 09.9
1412	1	203	33 20 10.23090	114 41 58.60570	209968.72	851971.81	31 18-9
1412		406	33 20 18-23090	114 41 58-60570	2473504.00	429844.78	51 07-1
1413	*	203	33 19 09.98790	114 42 38.72030	206501-76	845105.46	31 40+0
1613		406	33 19 09.98790	114 47 38*/2030	2470202.90	422897.80	50 45.0
1414	1	203	33 18 53.55310	114 43 06.13390	204160+00	843465.86	31 54.9
1414		406	33 18 53.55310	114 47 06.13390	2467901.30	421202.67	50 30+0
1415	+	203	33 18 34.77410	114 41 25.01460	202539.97	641582.73	32 05.0
1415		406	33 18 34.77410	114 43 25.01460	2466327.00	419281.41	50 19-6
1416	1	203	33 18 11.35160	114 43 49.62980	200428+62	839234.91	32 18-1
1416		406	33 18 11.35160	114 49 49.62980	2464272.70	416883.85	50 06-1
1417	*	203	33 17 10.98100	114 43 11.83230	203580-03	833103.10	31 56.5
1417		406	33 17 10.98100	114 43 11-83230	2467569.90	410829.81	50-26.8
1418	+	207	33 16 37.81720	114 41 10.36920	213861.29	829657.01	30 49.4
1418		406	33 16 37.81720	114 4) 10.36920	2477930.00	407631.32	51 33.6
1419		203	33 15 27.35510	114 43 18-09850	218236.29	822495+80	30 19-8
1419		406	33 15 27.35510	114 40 19-09850	2482475+00	400577.50	52 02.3
1420	*	203	93 14 48-41350	114 41 18-14400	213101.86	818605-30	30 52.2
1420		406	33 14 48.41350	114 41 18.14400	2477435.60	396565.41	51 29.3
1421	1	203	33 13 36.96550	114 40 27.02600	217379.51	811345.27	30 23-2
1421		406	33 13 36.96950	114 40 27.02600	2481885.60	389410.42	51 57.4
1422	1	203	39 13 18.16830	114 40 20.37700	217927+58	809440.43	30 19+3
1422		406	33 13 18-16830	114 40 20+37700	2482479.10	387519.38	52 01-1
1423		203	13 12 31.03300	114 40 34.16390	216714.13	804686.77	30 26.2
1423		406	33 12 31.03300	114 40 34-16390	2481379.90	382738+36	51 53-5
1424		203	33 12 15.42350	114 40 40.08810	216196.77	803113.57	30 29+2

1424		406	33 12 15.42350	114 40 40.08810	2480900 • 40	381153.32		51 50 - 2
1625	Ť	203	33 11 47.08670	114 40 35.34840	216574.15	800245.98	96	30 26 - 3
1425		406	33 11 67:08670	110.40 35.30840	2481346.30	378295.78		51 52.8
1426	1:	203	33 11 05.29010	114 40 29.20270	217659.08	796016.95	0.00	30 22+3
1426		5606	33 11 05.29010	114 40 29420270	2481932.30	374079+87		51 56 - 2
1427	7.	263	33 10 06.44600	114 40 43.63130	215780.02	790080.41	35	30 29+4
1427		406	33 10 06.44600	114 40 43+63130	2480795+80	368114.81		51 48+3
1428	*	203	33 09 19.35060	114 40 52,66020	214970.18	785327.29	-	30 33.7
1428		406	33 09 19.35060	114 40 52.66020	2480100.00	363344.00		51 43.3
1429	Ť	203	39 07 54.81100	114 41 43.68400	210555.09	776821.73	(2)	31 00+5
1929		606	33 07 54.81100	114 41 43.68400	2475890.00	354735.79		51 15+3
1430	7.	203	33 05 41.42570	114 47 25.70530	206858.48	763372.96	1,00	31 21.6
1430		406	33 05 41.42570	114 42 25.70530	2472516.40	341203.38		50 52.2
1431	7	2003	33 05 12.96750	114 42 11.25380	208061.85	760485.51	:=:	31 13.3
1431		406	33 05 12.96750	114 42 11.25380	2473788.40	338345.73		51 00.1
1432	Y	2013	33 04 56-17960	114 41 17-19140	212646.59	758747.32	~	30 43+5
1432		406	33 04 56-17960	114 4) 17.19140	2678413.10	336717.79		51 29+8
1433	7	203	33 03 56.78680	114 40 53.23920	214631-41	752726.41	-	30 29.6
1433		406	33 V3 56.78680	114 60 53.23920	2480541.20	330746.45		51 43-0
1434	7	203	33 03 18.62730	114 40 23.92360	217092.42	748847.66		30 13-1
1434		406	33 03 18.62730	114 40 23.92360	2483094.10	326927.87		51 59-1
1495	1	203	33 02 25.66840	116 90 17.61740	217582.22	743490+47		30 09.0
1435		406	99 02 25.66830	114 40 17.61740	2483711.80	321584.24		52 02.6
1436	7	203	33 07 56.96370	114 39 36.19080	221083.74	740558.57		29 46 • 0
1436		406	33 01 56.96320	114 39 36:19080	2487282.20	318737.05		52 25+3
1437	T.	293	33 02 56.05980	114 38 42.83420	225677.25	746497.31		29 17.7

1437		406	33 07 56.05980	114 38 42-83420	2491732.30	324778.60		52 54+7
1438	1	203	33 02 37.94620	114 38 14-80760	228047.49	744641-37		29 02+2
1438		406	33 UZ 37.9462U	114 88 14-80700	2494146.00	322984.95		53 10+1
1489	.7	203	33 42 42.13460	114 37 46.75010	230405.56	741001-49	+	28 46+4
1439		406	23 02 02.13060	114 57 46.75010	2496590+30	319402.66		53 25+5
1440	7	203	33 01 38,99950	114 57 05.88490	233865.34	738634.75	-	28 23 - 8
1440		406	17 01 38.79950	114 17 05.88490	2500105.50	317117.43		53 47.9
1441	*	703	33 01 31.34830	114 35 56-27420	239785.85	737813.05	+	27 45+8
1441		406	33 01 31.34830	114 35 56.27420	2506043+70	316439.55		54 26+2
1442	1	203	33 01 49,20840	114 34 55.44780	244979.11	739576.71	-	27 12.8
1442		406	33 01 49.20840	114 34 55.44780	2511193+10	318326.80		54 59+6
1443	9	203	13 02 11.46000	114 34 21-61510	247877.10	741802.93	-	26 54+7
1443		406	33 02 11.46000	114 34 21.61510	2514037.00	320621.59		55 18+2
1444	9	203	33 02 03.10200	114 33 12.90610	253720.GR	740912+95	4	26 17+1
1444		4016	31 02 03.10200	114 33 17.90610	2519899.30	319871.61		55 56.0
1445	*	203	33 01 40,45550	114 31 15.92280	263669.28	739459-14	-	25 13.2
1445		406	33 01 69,45550	114 11 15.92280	2529880.10	318656.20		57 00.2
1466	T	203	33 01 17.53990	114 30 27.39190	267774.95	735799+24	~	24 46+3
1446		406	33 01 12.53998	114 30 Z7.39190	2534072+00	315095.63		57 26.9
1447	- 1	203	32 59 29.46010	114 29 46-19200	271204.04	724642.79	~	24 22.7
1447		606	32 59 22.40010	114 29 46:19200	2537766.80	304024+62		57 49.5
1448	1	703	92 58 15.57160	114 29 29,64070	272565.53	717777.72	-	24 12.9
1448		4116	27 58 15.57160	114 29 29.64070	2539292.00	297194.22		57 58+6
1449	Ť	203	32 58 16.76060	114 29 nz.11500	274911.42	717881.45	-	23 57+7
1449		406	97 58 16.76060	114 29 02-11500	2541634.70	297354.01		56 13-8
1450	Ť	203	32 58 28.41760	114 28 17,18690	278767.11	719093-13	*	21 31.6

1450	406	32 58 28,41780	114 28 17.18690	2545441.70	298597.03	58 38.5
1451	203	32 57 51:00240	114 27 58.27500	280332.51	715240.75	23 22.9
1451	406	32 57 51.00240	114 27 58-27500	2547117.30	294843.68	58 48 • 9
1452	203	12 56 52.89230	114 28 15.20880	278850.23	709478.78	23 31-5
1452	606	32 56 53+69230	114 28 15.20880	2545773.20	289048.01	58 39-5
1453	203	32 56 06.43760	114 28 48,89930	275946.00	704702.50	23 49 • 4
1453	406	32 56 06.43700	114 28 48.89930	2542984.00	284203.75	58 21.0
1454	203	32 55 24.92470	114 28 33,71210	277211.49	700498.15	23 40+7
1454	606	32 55 24.92470	114 28 33.71210	2544349.60	280030.88	58 29+4
1500	203	32 54 22.35270	114 27 63-15340	281478.42	694144-98	23 12.5
1500	606	32 54 22.35270	114 27 43,15340	2548767.10	273781.55	58 57.2
1600	203	32 52 58.82283	114 27 50-24197	280816.94	685707.23	23 15-5
1600	406	32 52 58.82283	114 27 50.24197	2548307.43	265330.45	56 53.3
1790	203	32 50 39.87937	114 28 06.22867	279358.06	671674.42	23 22.7
1700	606	32 50 39.87937	114 28 06.22867	2547184.20	251266.81	58 44.5
1800	203	32 49 26.14592	114 29 36+00955	271644.46	664073.58	24 10+6
1800	406	32 49 24-14592	114 29 36:00955	2539654.32	243483.90	57 55 1
1900	203	32 48 50.07760	114 30 36.22870	266486.64	661475.58	24 42.9
1900	606	12 48 58+07760	114 30 36.22870	2534560.00	240763.50	57 22.1
1901	203	32 47 55.34660	114 31 28.16970	262007.38	655167.99	25 10.4
1901	406	32 47 55.34660	114 31 28.16970	2530232.60	234350.79	56 53-5
1902	203	32 47 32.07770	114 31 49+15930	260198.35	652829.54	25 21.5
1902	406	32 47 32.07770	114 31 49-15930	2528479.90	231969.83	56 67.0
1903	203	32 46 56.00810	114 31 51.27750	259990.62	649185.59	25 22.2
1903	606	32 46 56.00810	114 31 51.27750	2528359.20	228321.94	56 40.8
1904	203	32 46 11.39480	114 31 45.28700	260468.87	644673+10	25 18+5

1904	406	32 46 11.39480	114 31 45.28700	2528945.00	223822+15	56 44+1
2000	503	32 45 25.78660	114 31 33.33340	261455.78	640056.34	25 11-5
2000	406	32 45 25.78660	114 31 33.33340	2530041.79	219230.23	56 50-7
2100	203	32 45 25.34781	114 32 17.55283	257679.12	640039.89	25 35.4
2100	406	32 45 25.34781	114 32 17.55283	2526266+58	219123.67	56 26.4
2200	203	32 44 59.36240	114 32 17.55954	257658.99	637413.75	25 35 - 1
2200	406	32 44 59.36240	114 32 17:55954	2526309+12	216497.79	56 26 . 4
2300	203	32 44 58.63083	114 33 49.33745	249819.94	637399.10	26 24.8
2300	406	32 44 58,63083	114 33 49.33745	2518472-62	216296-13	55 35.9
2400	203	32 44 32.51389	114 33 49.32668	249800.58	634759.66	26 24.4
2400	406	32 44 32.51389	114 33 49.32668	2518516-23	213656.98	55 35.9
2500	203	32 44 32.49666	114 34 51,19491	244516.13	634798.94	26 57.9
2500	406	32 44 32.49666	114 34 51.19491	2513232.34	213570.21	55 01.9
2600	203	32 44 06.37650	114 36 51.17812	244496.86	632159+17	26 57.6
2600	406	32 44 06.37650	114 34 51-17812	2513276+04	210930.72	55 02.0
2700	203	32 44 04.09639	114 36 51.47272	234219+23	632010.94	28 02.6
2700	406	32 44 04.09639	114 36 51.47272	2503004.89	210537.46	53 55.8
2800	203	32 43 57.11177	114 36 50.73949	234276.11	631304.55	28 02-1
2800	406	32 43 57-11177	114 36 50.73949	2503078.59	209832+63	53 56+3
2900	203	32 43 57.11158	114 36 51+06909	234247+96	631304.76	28 02+3
2900	406	32 43 57.11158	114 36 51.06909	2503050-43	209832-17	53 56 - 1
3000	203	32-43 47.74195	114 36 53.13628	234063.64	630359.28	28 03.3
3000	406	32 43 47.74195	114 36 53.13628	2502888.71	208882.58	53 54.9
3100	203	32 43 47.74164	114 36 54.06545	233984-26	630359.90	28 03.8
3100	406	32 43 47.74164	114 36 54.06545	2502809.34	208881.29	53 54.4
3200	203	32 43 42.43660	114 36 54.21480	233967.12	629823.86	28 03.8

53 54+3	28 20.8	53 37+1	31 25+1	50 29.3
208345.00	630143.24	208600.51	626547.44	204309.08
2502805.00	231292.48	2500123.51	202058.22	2470983.68
14 36 54.21480	14 37 25.55221	14 37 25.55221	114 43 07,35030	14 43 07-35030
43 42.43660	43 45,37941	43 45.37941	07.28790	43 07*28790
404	203	909	203	406

DESCRIPTIONS OF 34 BOUNDARY POINTS
DETERMINED BY GEODETIC METHODS

# RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: BDRY, PT. NO. 1, Center of Colorado River, Calif-Ariz-Nev

ESTABLISHED BY: C. H. Sinclair YEAR: 1893 STATE: Arizona-California-Nevada

RECOVERED BY: L. G. Burdine VEAR: 1964 COUNTY: Mohave-San Bernardino-Clark

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

Boundary Pt. No. 1 is at the intersection of the 35th astronomic parallel and the centerline of the channel of the Colorado River. This point was determined in the 1893-99 survey of the California-Nevada boundary and is common to the boundaries of Arizona, California, and Nevada.

Geodetic azimuth and distance from reference stations to BDRY, PT. NO. 1:

		Dist	ance
Station	Azimuth	meters.	feet
BDRY, REF. PT. NO. 1B	135° 09' 51.8"	273.999	898.95
BDRY REF PT. NO. LA	313 46 06.2	268.348	880.41

#### U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

#### DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY, PT. NO. 2 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Mohave

California San Bernardino

Description, including sketch of object

Boundary Pt. No. 2 is located in the center of the channel of the Colorado River approximately one-half mile northerly from the A.T.&S.F. Railway Bridge at Topock.

BDRY, PT. NO. 2 is 247.195 meters or 811.01 feet in azimuth 234° 09' 34.9° from triangulation station REFUGE.

# U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY, PT. NO. 3 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: California County: San Bernardino.

Description, including sketch of object

The station is the determined center of the railroad bridge at Topock. Arizona. The center of the bridge was determined with a 300 ft. tape and marked with a 3 × 6 inch iron plate, screwed to an 8 by 8 inch wood timber. The station is a punch hole, surrounded by a chiseled triangle, stamped POINT NO. 3 1964.

A traverse connection was made to triangulation station SANTAFE. The distance being 754.68 ft. or (230.026

m.), east.

The geodetic azimuth from station SANTAFE to BDRY PT. NO. 3 is 89° 40' 19.6".

#### DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY, PT. NO. 4 CALIF-ARIZ

CHIEF OF PARTY: L G. Burdine YEAR: 1964

STATE: Arizona California COUNTY: Mohave

San Bernardino

Description, including sketch of objects

The station is 14 mile west of Topock, Arizona on the concrete center support of the U.S. Highway 66 bridge over the Colorado River. It is Point No. 4 of the interstate compact defining the boundary between the states of Arizona and California.

The mark is a standard triangulation disk stamped POINT NO. 4 cemented in a drill hole in the concrete of the center pier. It is midway between the east and west edges of the pier and under the center of the roadway overhead. This is not the exact center of the steelwork of the bridge because the steel is not centered on the concrete pier.

A traverse connection was made through an eccentric point to triangulation station CENTER which is on

the northeast corner of the center pier. The distance is 5.082 m. (16.67 ft.).

The geodetic azimuth from station CENTER to BDRY, PT. NO. 4 is 349° 10' 28"

## U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

#### DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: EL PASO = BDRY, PT. NO. 5 STATE: Arizona CALIF-ARIZ California CHIEF OF PARTY: L. G. Burdine YEAR: 1964

County: Mohave

San Bernardino DESCRIBED BY: J.E.F.

Note\* Height of telescope above station mark 1.44 meters, † Height of light above station mark

meters.

Surface-station mark. underground-station mark

Distances and directions to azimuth mark, reference marks and prominent objects which can be seen from the ground at the station

		Dis	tance	
Object	Bearing	Feet	Meters	Direction*
ARIZ 97 CENTER				0° 00° 00 0° 229 08 03.5

# Detailed description:

The station is near the center of a steel bridge which supports the El Paso Natural Gas Company and the Pa-

cific Gas and Electric Company pipes crossing the Colorado River at Topock, Arizona.

To reach the station from the post office in Topock, Arizona, go west on U.S. Highway 66, crossing the Colorado River Bridge for 0.5 mile to a side road sharp left, just before reaching the Santa Fe Railroad Underpass. Turn sharp left, double back and go southeast on a paved road for 0.2 mile to a side road left. Turn left and go southerly on a gravel road for 0.05 mile to a wire link gate. Pass through the gate and go southeasterly on the gravel road for 0.25 mile to the southwest end of the steel bridge which supports two large gas pipes. Pass through a wire link gate and pack along catwalk to the center of the bridge and the station.

The station is marked by a center punch hole surrounded by a chiseled triangle that is approximately 112 inches on a side. The mark is equal distance from both ends of the bridge and near the center of the catwalk. It is stamped

ELPASO 1964

Note: Reference marks or an azimuth mark were not set for this station. Obtain keys to locked wire link gates at the compressor station on a hill about \$4 mile west of Topock,

Note: This station is also POINT NO 5 of the interstate compact defining the boundary between the states of Arizona and California.

Refers to hopes in manuals of triangulation and state publications of triangulation. To nearest mean only when no triangulation Jeveling is being done

<sup>2</sup> Direction angle measured clockwise, referred to stotal status.

#### DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY, PT. NO. 6 CALIF-ARIZ

CRIEF OF PARTY: L. G. Burdine STATE: Arizona COUNTY: Yuma

California San Bernardino

Description, including sketch of object:

The station is at the determined center, east and west, of the Parker Dam which lies across the Colorado River

18 miles north of Parker, Arizona.

The station is marked by a standard station mark disk, stamped POINT NO. 6 1964, cemented in a drill hole in the center of the concrete walk along the north side of the top of the dam. It is situated at the measured center, east and west, of the center floodgate of the dam.

A traverse connection was made to triangulation station PARKER DAM, the distance being 20.646 meters

or 67.74 feet

The geodetic azimuth from station PARKER DAM to BDRY, PT. NO. 6 is 2678 147 37".

#### U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

#### DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY, PT. NO. 7 CALIF-ARIZ

CRIEF OF PARTY: L. G. Burdine LEAR: 1964 STATE Arizona COUNTY: Yuma

> San Bernardino California

Description, including sketch of object:

Boundary Pt. No. 7 lies in the center of the Colorado River approximately 2,050 feet upstream from the earth fill of Headgate Rock Dam.

BDRY, PT. NO. 7 is 162.154 meters or 552.00 feet in azimuth 141° 12° 32.9° from triangulation station DOCK,

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: WATHEN = BDRY, PT. NO. S.

CALIF-ARIZ

STATE: Arizona-California COUNTY: Yuma

San Bernardino

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: G. D. Banks

Note*	Height of telescope above station mark 3.20 meters, † Height of light above station mark meters.				
desc. none	Surface-station mark, underground-station mark	Distances and directions to azimuth mark, reference marks and prominent objects which can be seen from the ground at the station			
			Distance		
	Object	Bearing	Feet	Meters	Direction;
11b 11b	BLUFF R.M. 1 R.M. 2 R.M. 1 to R.M. 2	SSW WNW	53.73 60.66 85.28	16.377 18.489 25.994	0° 00° 00 0 112 19 37 208 34 38

# Detailed description:

The station is fixed point No. 8 of the Arizona-California boundary. It is located at the center of the earth fill

of the Headgate Rock Dam which is airline, about 2 miles north-northeast of Parker, Arizona.

To reach the station from the intersection of Riverside Drive and California Avenue in Parker, go east on Riverside Drive for 0.9 mile to a fork and sign "DEAD END ROAD". Take the left fork and go north on a paved road for 0.55 mile to a locked cable across the road. Key to the lock can be obtained from the caretakers residence which is the house to the north of the gate.) Continue north on the paved road, crossing the concrete spillway, for 0.3 mile to the north end of the spillway. Turn right and go northeast on a track road for 0.3 mile to the center of the Headgate Rock Dam and the station.

Station mark is a bronze plate, stamped 21+00JS 11S BM ELV 389.91 CRIR, set in the top of an 8 by 14 inch concrete post flush with the ground surface. It is 25 feet east of the center of the dam and 3.8 feet west of a concrete monument which is about 8 feet high and has the letters WATHEN DAM USIS 1941 on the west side, CALIFORNIA on the north side and ARIZONA on the south side.

Reference mark 1 is a standard disk, stamped WATHEN NO 1 1964, set in the top of a round concrete post, 10 inches in diameter and projects about 2 inches above the ground surface. It is 18 feet west of the center of the dam and about the same elevation as the station.

Reference mark 2 is a standard disk, stamped WATHEN NO 2 1964, set in the top of a round concrete post, 10 inches in diameter and projects about 3 inches above the ground surface. It is 15 feet west of the center of the dam and about the same elevation as the station.

<sup>\*</sup> Refers to notes in minute of triangulation and visit publication of triangulation \* To states meter only when including meters and when including meters are a define done

<sup>2.</sup> Direction angle measured clockwise, referred to minual engineer.

## DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY, PT. NO. 9 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964: STATE: Arizona COUNTY: Yuma

California San Bernardino

Description, including sketch of object:

Boundary Pt. No. 9 lies on the centerline of the river approximately 3,625 feet westerly from Point No. 8.

BDRY. PT. NO. 9 is 57.526 meters or 188.73 feet in azimuth 338° 55' 04.3" from triangulation station FLAT.

#### U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY, PT. NO. 10 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Yuma

California San Bernardino

Description, including sketch of object:

Boundary Pt. No. 10 lies in the center of the Colorado River at a point where the parallel of 34" 10" north latitude intersects said centerline:

BDRY PT NO 10 is 99.697 meters or 327.09 feet in azimuth 285° 07° 42 6° from triangulation station VIEW-

## U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

#### DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY, PT. NO. 11 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Yuma

> California San Bernardino

Description, including sketch of object:

The station is located about 1 mile north of Parker, Arizona in the center of the auto bridge over the Colorado River. This is Point 11 of the interstate compact defining the boundary between the states of Arizona and California.

The station is marked by a center punch hole surrounded by a chiseled triangle that is approximately 11/2 inches on a side. The mark is equal distance from both ends of the bridge and in the center line of Spur 95. It is stamped POINT 11 1964 on the metal expansion beam of the bridge.

A traverse connection was made to SPAN RM I which is southeast and near the center of the walkway of the

bridge. The distance being \$.474 meters, 27.80 feet.

The geodetic azimuth from station SPAN RM I to BDRY, PT. NO. 11 is 103° 18' 31".

## DESCRIPTION OF TRIANGULATION STATION

Name of Station: BDRY, PT. NO. 12 CALIF-ARIZ State: Ariz.-Calif. County: Yuma-Riverside

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 DESCRIBED BY: J. E. Sutton

Note*	Height of telescope above station mark 1.65 meters, † Height of light above station mark me						
Ib 7a	Surface-station mark, underground-station mark		stances and directions to azimuth mark, reference marks inent objects which can be seen from the ground at the				
		a per property	Die	stance			
	Object	Bearing	Feet	Meters	Direction‡		
	SPUR 1935 BDRY REF. PT. NO. 12	SW			00° 00′ 00 00° 295 17 30 81		

## Detailed description:

The station is located at the center of the earth fill section of the Palo Verde Diversion Dam, which is about 10 miles northeast of Blythe, 0.25 mile east of U.S. Highway 95 and 0.05 mile northeast of the flood gates of the Palo Verde Diversion Dam.

To reach the station from the junction of U.S. Highways 60, 70 and 95, which is at the east edge of Blythe, go north on U.S. Highway 95 for 6.5 miles to where the highway turns east. Continue on U.S. Highway 95 east and northeast for 4.2 miles to a side road right. Turn right, east on gravel road for 0.25 mile to a gate and small building on the left. Pass through the gate and turn left across the concrete dam for 0.05 mile to the station in the center of the road as described.

The station mark is a standard disk set in the top of a 12-inch round concrete monument. It is set flush with the ground and is stamped POINT NO. 12A 1964. It is in the center of the earth dam.

Riverside

U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

#### DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY PT. NO. 13 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Yuma

Description, including sketch of object

The station is at the measured center of the U.S. Highway 60-70 bridge spanning the Colorado River 3 miles east of Blythe, California.

California

The station is marked by a standard station mark disk, stamped POINT NO 13 1964, cemented in a drill hole in the center of the concrete roadbed at the center of the center span of the bridge.

A traverse connection was made to triangulation station EHREN, the distance being 4.607 meters or 15.11 feet.

The geodetic azimuth from station EHREN to BDRY, PT. NO. 13 is 50° 54' 01".

<sup>\*</sup> Refers to more in spanials of triangulation and leave publications of triangulation. 

To move to book seel), when my triangulation presing is being done.

<sup>2</sup> Direction copie complete discover, whereal to make accome

## DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY, PT. NO. 14 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Yuma Imperial

California

Description, including sketch of object.

This station was established as fixed point number 14. It is 8 miles south of Ripley, and at the determined center of the CIBOLA TOLL BRIDGE.

The station is a punch hole in the top of a 60 penny nail in a wooden plank in the bridge.

A traverse connection was made to triangulation CIBOLA, the distance being 25.649 meters-84.15 feet,

The geodetic azimuth from station CIBOLA to BDRY. PT. NO. 14 is 177" 48' 52".

## U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY. PT. NO. 15 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUSTY: Yuma California Imperial

Description, including sketch of object:

Boundary Pt. No. 15 lies on the centerline of the Colorado River approximately \$400 feet northward of the center of the overflow section of Imperial Dam

BDRY. PT. NO. 15 is 265.335 meters or 870.52 feet in azimuth 10° 06' 03.4" from triangulation station SQUAW.

## U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY, PT. NO. 16 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Yuma California Imperial

Description, including sketch of object:

This station was established as fixed point number 16. It is about 1412 miles northeast of Yuma, 432 miles north of Mittry Lake, 2 miles northwest of the Yuma Proving Grounds Headquarters and at the determined center of the crest of the concrete weir of Imperial Dam.

The center of the weir was determined with a 300 foot steel tape.

The station is a standard station mark disk, stamped POINT NO 16 1964, cemented in a drill hole in the determined center of the crest of the concrete weir of Imperial Dam.

A traverse connection was made to triangulation station IMPERIAL, the distance being 227.998 meters, east-northeast.

The traverse connection was made with an Electrotape.

The geodetic azimuth from station IMPERIAL to BDRY PT. NO. 16 is 95° 12" 47.0".

# DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY, PT. NO. 17 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964 STATE: Arizona COUNTY: Yuma

California Imperial

Description, including sketch of object:

Boundary Pt. No. 17 lies at the intersection of the two lines as follows:

(1) A line through Boundary Pt. No. 16 and normal to the longitudinal axis of Imperial Dam.

(2) A line extending northeasterly from the center of the overflow section of Laguna Dam (Boundary Pt. No. 18) and normal to the longitudinal axis of the said Laguna Dam.

BDRY PT NO. 17 is 42.682 meters or 140.03 feet in azimuth 182° 41' 54.1" from triangulation station MITTRY.

This boundary point was not marked in the 1964 C&GS survey.

#### U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY, PT. NO. 18 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Yuma California Imperial

Description, including sketch of object:

This station was established as fixed point number 18. It is about 11 miles northeast of Yuma and 5 miles southwest of the Yuma Proving Grounds Headquarters.

The station is a standard station mark disk, stamped POINT NO 18 1964, cemented in a drill hole in the determined center of the crest of the concrete weir of Laguna Dam.

A traverse connection was made to triangulation station LAGUNA, the distance being 60.674 meters, eastsoutheast.

The center of the weir was determined by Electrotape

The geodetic azimuth from station LAGUNA to BDRY. PT. NO. 18 is 142° 12' 45.5".

## U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY PT. NO. 19 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Yuma California Imperial

Description, including sketch of object

Boundary Pt. No. 19 lies on the centerline of the Colorado River approximately 5800 feet southwesterly of Point 18.

BDRY PT. NO. 19 is 296.126 meters or 971.54 feet in azimuth 114° 10' 19.6' from triangulation station KOOL.

## DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY, PT. NO. 20 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964 STATE: Arizona

California

COUNTY: Yuma Imperial

Description, including sketch of objects

Boundary Pt. No. 20 lies on the centerline of the Colorado River where said centerline intersects the section line between Sections 4 and 9, Township 8 South, Range 22 West, Gils and Salt River Meridian.

BDRY, PT. NO. 20 is 146.176 meters or 479.58 feet in azimuth 89° 19' 51.6" from triangulation station T8S R22W WS4 PS9

#### U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRIANGULATION STATION

Height of telescope above station mark 11.59 meters, † Height of light above station mark

NAME OF STATION: BDRY, PT. NO. 21 (BLM)

STATE: Arizona California COUNTY: Yuma

CALIF-ARIZ

Imperial

CHIEF OF PARTY: L. G. Burdine

Note\*

YEAR: 1964

DESCRIBED BY: C. M. Call.

meters.

			Dist	ance	
	Object	Bearing	Feet	Meters	Direction 1
II b II b	DELTA (USGS) Reference Mark No. 1 Reference Mark No. 2 Yuma, Southern Pacific Pipeline Inc., West tower of suspension bridge BDRY, PT. NO. 22 (BLM) CALIF-ARIZ	NNE SSE SSE	67.25 68.68 (1.2 m	20, 498 20, 935 illes)	00° 00′ 00.0° 12 44 34 151 22 28 152 45 01.7

## Detailed description:

The station is located 434 miles northeast of Yuma, 252 miles south-southeast of Bard, and 0.65 mile west of the center of the Colorado River. It is in the edge of a field road between a cultivated field and the west bank

of an irrigation canal.

To reach the station from the post office in Bard, go north and east on paved road for 1.0 mile to a curve to the left with graveled road straight ahead; continue straight east on graveled road 0.8 mile to levee embankment. Turn left and go north 0.1 mile to road on right up to top of levee; turn right up on to levee then sharp right and go south along the top 1.8 miles to a fork. Take right fork and go southwest and west 0.8 mile to side road on left; turn left off levee and go south 0.8 mile to a side road on the left. Turn left and go east 0.1 mile to a corner and the station on right just after turning south.

The station mark is a U.S. Bureau of Land Management Cadastral Survey disk stamped CAL ARIZ PT NO 64 riveted to the top of a 2-inch iron pipe set in a mass of concrete. It is about 2 inches below the surface of the field road and is 33.4 feet west of the top of the west bank of the irrigation canal and 6.2 feet east of an

unpainted, wooden 4 X 4 witness post.

Refers to notes in manuals of triangulation and scate publications of triangulation.
 To nearest moter only, when no trigonometric leveling is being done.

I Direction-angle measured cliefawise, referred to initial seation.

Reference mark number one is a standard disk stamped CAL ARIZ PT NO 21 NO 1 BLM 1964 cemented in the top of a 12-inch cylindrical concrete monument projecting 8 inches above ground. It is 9 feet west of the top of the west bank of the irrigation canal and 1.4 feet southeast of a metal witness post with sign. It is about 2 feet higher than station elevation.

Reference mark number two is a standard disk stamped CAL ARIZ PT NO 21 NO 2 BLM 1964 cemented in the top of a 14-inch concrete cylindrical monument projecting 3 inches above ground. It is 10 feet west of the top of the west bank of the irrigation canal, 1.7 feet morth of a metal witness post with sign, and 18 inches higher

than station elevation.

R.M. NO. 1 to R.M. NO. 2 is 127.19 feet (38.768 meters).

#### U.S DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

#### DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: BDRY PT. NO. 22 (BLM) STATE: California COUNTY: Imperial CALIF-ARIZ Arizona Yuma CHIEF OF PARTY: L G. Burdine YEAR: 1964 DESCRIBED BY: W. V.M.

Height of telescope above station mark 4.87 meters, † Height of light above station mark desc. Surface-station mark. Distances and directions to azimuth mark, reference marks and underground-station mark prominent objects which can be seen from the ground at the station

		Distance			
Object	Bearing	Feet	Meters	Direction 1	
POLE R.M. 1 R.M. 2 R.M. 1 to R.M. 2 BDRY, PT. NO 21 (BLM) CALIF- T8S R22W WS4 PS9	N E ARIZ	32 45 29 45 44 80	9 891 8 977 15 655	00° 00° 00 0° 109 24 33 202 00 13 108 58 04.7 166 47 42.1	

#### Detailed descriptions

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Note.

The station is located in a very sandy area 6.0 miles southwest of Laguna Dam, 414 miles northeast of Yuma, 3.0 miles south of Bard and 1.0 mile west of the Colorado River

To reach the station from Imperial Dam, drive southerly on a paved road for 4.85 miles to Laguna Dam. Continue south on a paved road for 1.15 miles to a fork. Take the left fork, straight ahead, and drive southerly on a lexee road for 3.63 miles to a fork. Take the right fork and drive southwest and west on a levee road for 0.85 mile to a side road left. Turn left, leaving the levee road, and drive south on a field road for 0.75 mile to road turning left. Turn left and follow the field road east for 0.05 mile to road turning south. Turn right and follow the road south along the east end of a cultivated field for 0:1 mile to an irrigation ditch along the east end of the cultivated field. Leave the road and drive south and west along the west and north side of the irrigation ditch for 0.2 mile to a small wooden bridge over the irrigation ditch. Turn left and drive south, crossing the bridge, thence turn left and drive east on a field road along the north side of a cultivated field for 0.1 mile to the northeast corner of a cultivated field. Turn right and drive south along the east end of a cultivated field 0.05 mile to the southeast corner of a cultivated field. Select way south through sand dunes for 0.25 mile to the station.

The station mark is a Bureau of Land Management cap mark riveted to the top of a 21; inch galvanized pipe which projects 4 inches above the ground surface. It is 1.5 feet northeast of a metal witness post with a sign at-

tached.

Reference mark 1 is a standard disk, stamped CAL ARIZ PT NO 22 NO 1 1964, set in the top of a cylindrical concrete monument which is 12 inches in diameter and projects 4 inches above the ground surface. It is 33.0 feet north-northwest of a metal witness post with a sign attached.

Reference mark 2 is a standard disk, stamped CAL ARIZ PT NO 22 NO 1 1964, set in the top of a cylindrical concrete monument which is 12 inches in diameter and projects 5 inches above the ground surface. It is 31.0 feet east of a metal witness post with a sign attached.

meters.

Refers to notes in minusels of friangulation and state publications of triangulation. Fo marrest meter only, when an exponentieric leveling is being gone.

Direction-angle measured clockwise, referred an initial station.

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: BDRY. PT. NO. 23 (GLO)

CALIF-ARIZ

STATE: California-

Arizona

COUNTY Imperial-Yuma

CHIEF OF PARTY: L. G. Burdine

YEAR! 1964

DESCRIBED BY: D. J. Novak

Note\* Height of telescope above station mark 5.21 meters, † Height of light above station mark meters. desc. Surface-station mark. Distances and directions to azimuth mark, reference marks and underground-station mark prominent objects which can be seen from the ground at the station

Distance Object Bearing Feet Meters Direction 1 000 001 00.01 BDRY PT. NO. 22 BLM CALIF-ARIZ R.M. 2 90 26 32 208 81 163 6451 270 51 07 R.M. 1 132 77 140.467) POLE 01 58 1

## Detailed description

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The station is located about 31, miles northeast of Yuma, 31, miles northeast of the Indian Mission and School

in north Yuma, 3 miles south of Bard and in the center of a dual road.

To reach the station from the city hall in Yuma, go east on 1st Street for 0.4 mile to Penitentiary Avenue. Turn left and go north on Penitentiary Avenue for 0.2 mile to a fork at the north end of the Colorado River bridge. Take the right fork and go northerly on a paved road for 0.25 mile to a side road right. Turn right and go east on a levee road for 3.05 miles to a side road left. Turn left and drive north on a bladed dirt road for 0.4 mile to a farm house on the west side of the road. Continue north on the bladed dirt road for 0.6 mile to a crossroad. Continue north on the dirt road for 0.5 mile to the station as described.

The station mark is a U.S. General Land Office Survey mark riveted to the top of a 2-inch galvanized pipe set in concrete that projects 4 inches above ground surface. It is stamped 1. CAL \$12 S7 PT NO 23 ARIZ 1949 1964. It is 13 feet west of the center of a dirt road, 11 feet east of the center of a dirt road, 3 feet east of a pink iron pipe that projects 4 feet above the ground surface and 1 foot south of a 6 inch by 10 inch railroad tie that

projects 6 feet above the ground surface.

Reference mark 1, a standard disk stamped "GLO 14 S12 S7 NO 1 1964"; is set in the top of a cylindrical concrete monument that is 12 inches in diameter and projects 3 inches above the ground surface. It is 11 feet west of the center of the dirt road, 9 feet east of the center of a dirt road, 2.5 feet south of a power pole and 1.5 feet northwest of a metal witness post.

Reference mark 2, a standard disk stamped "GLO 14 S12 S7 NO 2 1964", is set in the top of a cylindrical concrete monument that projects 6 inches above the ground surface. It is 11 feet west of the center of the dirt road, In feet east of the center of the dirt road, I feet north of a power pole and 1.8 feet south-southwest of a metal witness post.

Note: No azimuth mark was established at this station Observations were made from a 16 foot stand.

Refers to notes in manuals of (manuals on and state publications of (tuberfations). To nearest meter only, when no your nonestic leveling is being done.

<sup>5.</sup> Direction angle main area chickware, referred to initial errana-

#### DESCRIPTION OF TRAVERSE STATION

Name of Station: BDRY, PT. NO. 24 (GLO) CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: California

California County: Imperial Arizona Yuma

Description, including sketch of object

5 miles northeast of Yuma, Arizona, 312 miles east of the Government Indian School and the Purisima Con-

ception Mission, in the northwest angle of a crossroad and I foot southwest of a power pole.

A traverse connection was made to triangulation station POLE, distance being 26.26 feet 8.004 meters east of station POLE. The mark is a U.S. General Land Office Survey disk stamped T85 R23W R22W S12 S7 S13 S18 CAL ARIZ PT NO 24 1964, and is riveted to the top of a 2½ inch galvanized pipe flush with the surface of the ground.

The geodetic azimuth from station POLE to BDRY, PT. NO. 24 (GLO) is 298° 00' 17".

#### U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

#### DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY PT NO 25 (GLO) CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona County: Yuma California Imperial

Description, including sketch of object.

The station is 3.7 miles south-southwest of Bard, 2.7 miles northeast of the county courthouse in Yuma, and I mile north of the Colorado River levee. It is on the east side of a field road at a fence corner in an area of irrigated farm land.

The mark is a General Land Office Survey disk of bronze riveted to the top of a 212-inch iron pipe set in a mass of concrete and is supposed to be stamped CAL ARIZ PT NO 25 T8S R23W S14 S13 S11 S12 49 64 but is partly mutilated and not completely legible. It is 10.5 feet east of the center of a field road level with the surface of the road, 1.5 feet west southwest of a fence corner post, 0.4 foot west of an unpainted 4 × 4 witness post.

A traverse connection was made to triangulation station COB. The distance is 15.447 meters or 50.68 feet. The geodetic azimuth from station COB to BDRY, PT. NO. 25 (GLO) is 0° 26' 53".

## DESCRIPTION OF TRIANGULATION STATION

Height of telescope above station mark 11.95 meters, † Height of light above station mark

NAME OF STATION: BDRY, PT. NO. 26 (BLM)

CALIF-ARIZ

STATE: Arizona-

COUNTY: Yuma-Imperial

California

CHIEF OF PARTY: L. G. Burdine

Note\*

YEAR: 1964

DESCRIBED BY: J. E. Sutton

meters

desc.	Surface-station mark, underground-station mark	Distances and direct prominent objects whi			
	4, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		Dis	tance	
	Object	Bearing	Feet	Meters	Direction:
11b 11b	BEE Reference Mark No. 2 Reference Mark No. 1 COB	W SW	85.70 104.61	26 120 (31 885)	00° 00° 00 0° 20 39 31 320 53 28 100 45 03 0

# Detailed description:

The station is located about 24; miles northeast of Yuma and is located in the center of a crossroad.

To reach the station from the City Hall in north Yuma, go east on "1" Street for 0.4 mile to Penitentiary Avenue. Turn left, north on Penitentiary Avenue for 0.25 mile to a Y-fork. Turn right up over railroad bridge and go north for 0.25 mile to a side road right. Turn right, east, down on to a levee road for 2.05 mile to a side road left. Turn left, north, on bladed road for 0.5 mile to a crossroad and the station as described.

The station mark is a Bureau of Land Management mark. It is riveted to the top of a 3 inch galvanized pipe which is 14 inches underground. It is stamped CAL ARIZ PT NO 26 1, S14 S13 1949 1964. It is 19 feet east of the center of a north-south field road, 4 feet south of a 4 by 4 wooden witness post and is in the center of an east-west field road.

Reference mark No. I is a standard disk set in the top of a 12-inch round concrete monument. It projects 7 inches and is stamped CAL ARIZ PT NO 26 1/2 S14 S13 NO 1 1964. It is 74 feet south of an east-west field road, 48 feet west of a north-south field road and 2.2 feet south of a metal witness post and sign.

Reference mark No. 2 is a standard disk set in the top of a 12-inch round concrete monument. It projects 10 inches and is stamped CAL ARIZ PT NO 26 14 S13 NO 2 1964. It is 66 feet west of a north-south field road, 22 feet north of an east-west field road and 1.7 feet east of a metal witness post and sign.

Refers to notes in manual, of manualation and state multications of frantalation.
 To nearest mater only, when no triannometric leveling is being doze

<sup>:</sup> Direction-angle measured clockwise, referred in mittal section.

#### DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION BORY, PT. NO. 27 (BLM)

CALIF-ARIZ

STATE: California Arizona

YEAR: 1964

COUNTY: Imperial Yuma

DESCRIBED BY J.E.F.

Note!

CHIEF OF PARTY: L. G. Burdine

Height of telescope above station mark 1.65 meters, † Height of light above station mark

meters

See below

Surface-station mark. undergroung-station mark

Distances and directions to azimuth mark, reference marks and prominent objects which can be seen from the ground at the station.

		Dis	tance	
Object	Bearing	Feet	Meters	Direction‡
BDRY, PT. NO. 26 (BLM) CALIF- Reference mark No. 1 Reference mark No. 2	ARIZ SSE WNW	84 10 58.67	25 635 17 881	0° 00′ 00.00′ 94 32 50 208 55 49

## Detailed description:

115 116

The station is located 12 mile north of the north edge of the city limits of Yuma, Arizona and the Colorado River, about 0.15 mile north of the buildings of the Government Indian School and the Purisima Conception Mission, and on the east shoulder of a paved road in the Yuma Indian Reservation.

To reach the station from the city hall in Yuma, go east on 1st Street to Penetentiary Avenue, turn left and go north on Penetentiary Avenue 0.2 mile to a fork at the north end of the Colorado River bridge. Take the right fork, cross a railroad overpass and go northerly on a paved road for 0.25 mile to a side road on the right, continue northerly on the paved road for 0.1 mile to the station on the right.

Station mark is a U.S. Dept. of The Interior Bur. of Land Management Cadastral Survey disk, stamped CAL ARIZ PT NO 27 1964, riveted to the top of a 2 inch galvanized iron pipe set in concrete and projects 4 inches.

It is 12 feet east of the center of the road.

Reference mark No. 1. a standard disk stamped CAL ARIZ PT NO 27 NO 1 1964, set in top of a 12 inch concrete cylinder that projects 3 inches. It is 26.5 feet west of the center of the paved road and 1.5 feet west of a metal witness post with sign,

Reference mark No. 2, a standard disk stamped CAL ARIZ PT NO 27 NO 2 1964, set in top of a 12 inch concrete cylinder that projects 3 inches. It is 24.5 feet west of the center of the paved road and 3.5 feet north of a metal witness post with sign.

<sup>\*</sup> Represso mires in manuals of triangulations and start publications of triangulation.

To native times of this sides in triangulation and start public is being done.

Почетия спеце презульне посучене перетия и пинал станав.

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: BDRY. PT. NO. 28 (BLM)

CALIF-ARIZ

STATE: California-

COUNTY: Imperial-Yuma

Arizona

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: D. J. Novak

Note*	Height of telescope above station mark 1.56 meters, † Height of light above station mark				
desc.	Surface-station mark, underground-station mark	Distances and direct prominent objects whi			
			Dis	tance	
	Object	Bearing	Feet	Meters	Direction‡
12a 12a	DELTA (USGS) R.M. 1 CAL ARIZ PT NO 29 RM BDRY, PT. NO. 29 (BL)		66 45 46 17 28 16	20.254 14.072 8.582	00° 00′ 00.0° 101 22 26 288 48 04 235 19 51.9

## Detailed description

The station is located at the Indian Mission Hospital in Yuma, east of the northeast corner of rock wall surrounding the hospital and on road right-of-way.

To reach the station from the City Hall in Yuma, go east and north on First Street for 0.6 mile to a fork just after crossing the Colorado River bridge. Turn right and go north on a paved road crossing a wooden bridge for

0.25 mile to the station on the right.

The station mark, a U.S. Department of the Interior Bureau of Land Management Cadastral Survey disk, stamped "CAL ARIZ PT NO 28 1964", is riveted to the top end of a 2-inch cast iron pipe set in concrete and projects 3 inches above the ground surface. It is 112 feet south of the center of a T-road intersection, 43 feet southeast of power pole number 8725 D with a metal witness post sign. 29 feet east of the northeast corner of a rock wall and 14 feet east of the center of a paved road.

Reference mark 1, a standard disk stamped "CAL ARIZ PT NO 28 NO 1 1964", is cemented in a drill hole in an outcrop and flush with the surface. It is 89 feet southeast of the northeast corner of the rock wall, 68 feet

southeast of the center of the paved road and 48 feet south of the center of a track road.

Reference mark 2, a standard disk stamped "CAL ARIZ PT NO 29 NO 1 1964", is cemented in a drill hole in an out crop and flush with the surface. It is 37.5 feet south of the northeast corner of the rock wall, 19 feet west of the center of the paved road and 4 feet south of the power pole

Note: No azimuth mark established at this station.

Refers to notes in manuals of friangulation and state publications of triangulation.
 To natural mater only, when no triangulation leveling is being done.

<sup>2.</sup> Threey manufer maximed convenies, smarred to initial eration

#### DESCRIPTION OF TRIANGULATION STATION

Name of Station: BDRY, PT. NO. 29 (BLM)

CALIF-ARIZ

STATE: Ariz-Calif.

County: Yuma-Imperial

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: J. W.

Quesinberry

Note*	Height of telescope above station mark 6.03 meters. † Height of light above station mark					
desc	Surface-station mark. underground-station mark	Distances and direct prominent objects whi				
			Distance			
	Object	Bearing	Feet	Meters	Direction‡	
12a 12a	BDRY PT. NO. 26 BLX CAL ARIZ PT NO 28 RX as R.M. No. 2) R.M. No. 1 BDRY PT. NO. 28 BLX	I 1 (Used ESE N	88 41 37 09 28 16	26 948 11 306 8 582	0* 00' 00.00* 37 58 18 276 16 37 5 11 41	

# Detailed description:

The station is located at the Indian Mission Hospital in Yuma, at the northeast corner of rock wall surrounding the hospital and on road right-of-way.

To reach the station from the City Hall in Yuma, go east and north on First Street for 0.6 mile to a fork just after crossing the Colorado River bridge. Turn right and go north on a paved road crossing a wooden bridge for 0.25 mile to the station on the left.

Station mark, a U.S. Dept. of The Interior Bur. of Land Management Cadastral Survey disk, stamped CAL ARIZ PT NO 29 1964, is riveted to the top end of a 2-inch cast iron pipe set in concrete and projects 4 inches above the ground surface. It is 23 feet south of a power pole with a witness post sign, 14.5 feet west of the center of a blacktop road and 0.7 feet east of the northeast corner of a rock wall.

of a blacktop road and 0.7 feet east of the northeast corner of a rock wall.

Reference mark 1, a standard disk stamped CAL ARIZ PT NO 29 NO 1 1964, is cemented in a drill hole in an outcrop and flush with the surface. It is 37.5 feet south of the northeast corner of the rock wall, 19 feet west of the center of the blackton road and 4 feet south of the power rolls.

of the center of the blacktop road and 4 feet south of the power pole.

Reference mark 2, a standard disk stamped CAL ARIZ PT NO 28 NO 1 1964, is cemented in a drill hole in an outcrop and flush with the surface. It is 89 feet southeast of the northeast corner of the rock wall, 68 feet southeast of the center of the blacktop road and 48 feet south of the center of a track road.

Note: No azimuth mark established at this station. Observations were made from a 20 foot stand.

<sup>\*</sup> Refere to mote, in mamore of tranquistion and state publications of tranquistion . To measure mater toldy, when he transpondence leveling in being done

<sup>2</sup> Directum angle measured clocarcian reterred to initial station.

## DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY. PT. NO. 30 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 STATE: Arizona COUNTY: Yuma California Imperial

Description, including sketch of object:

The station is located about 0.1 mile north of the Colorado River and the north edge of the city of Yuma. It is in the west curb of the wooden bridge which carries the oiled road to the Yuma Indian Mission and School over the Southern Pacific Railroad tracks.

To reach the station from the city hall in Yuma, go east on 1st Street to Penitentiary Avenue; turn left and go north on Penitentiary Avenue for a combined distance of 0.6 mile to a fork at the north end of the Colorado River bridge. Take the right fork over the railroad bridge to the station on the left near the northwest end of the bridge.

The mark is a center-punched lag bolt screwed into the 6 × 6 timber forming the west curb of the bridge. It

is marked by the letters "PT NO 30" carved in the timber just south of the bolt.

A traverse connection was made to PT NO 30 RM (BLM) the distance being 9.2748 meters or 30.43 feet and the bolt is 0.61 meter higher than the RM.

This station is Point Number 30 of the Interstate Boundary Compact between the states of Arizona and Cali-

The geodetic azimuth from station BDRY, PT. NO. 30 RM to BDRY, PT. NO. 30 is 89° 43' 33".

#### DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: BDRY, PT. NO. 31 (BLM)

CHIEF OF PARTY: L. G. Burdine

RM 1

RM 2

CALIF-ARIZ

STATE: California-Arizona

COUNTY: Imperial-Yuma

YEAR: 1964

DESCRIBED BY, G. D. Banks

Note\* Height of telescope above station mark 12.05 meters, \* Height of light above station mark meters Distances and directions to azimuth mark, reference marks and desc. Surface-station mark. underground-station mark. prominent objects which can be seen from the ground at the station none

Object

BDRY PT. NO. 30 CALIF-ARIZ

Distance Feet Meters Direction 1 Bearing 02 001 00 02 82 27 37 247 16 48 728) XXX194.54 (59. 296) 174 57 12.4

BDRY PT. NO. 33 CALIF-ARIZ

desc:

desc.

Detailed description: The station is located airline, about 12 mile north-northeast of Yuma and 0.2 mile north of the Arizona Check Station on old U.S. Highway 80.

To reach the station from the post office in Yuma, go north on Main Street for 0.25 mile to First Street. Turn right and go cast and north on First Street (old U.S. Highway 80) for 0.4 mile to a fork at the north end of a bridge over the Colorado River. Take the left fork (old Highway 80) and continue north on the paved road for (1.05 mile to the south end of an old abandoned check station and the station on the right.

Station mark is a U.S. Bureau of Land Management bronze disk, stamped CAL ARIZ PT NO 31 1964, brazed to the top of a 3-inch iron pipe which is set in an irregular mass of concrete flush with the surface of the ground. It is 62 feet east of the centerline of old U.S. Highway 80, 20 feet east-northeast of a wooden flagpole and 13 feet southeast of the southeast corner of a brick building.

Reference mark I is a standard disk, stamped CAL ARIZ PT NO 31 NO 1 1964, cemented in a drill hole in the top of the north end of a concrete abutment which projects about 3 feet above the ground surface. It is 125 feet south of the southwest corner of the brick building. 19 feet east of the centerline of the nighway and about 5 feet higher in elevation than the station

Reference mark 2 is a standard disk, stamped CAL ARIZ PT NO 31 NO 2 1964, cemented in a drill hole in the top of the southwest corner of a railroad signal foundation which projects about 2 feet above the ground surface. It is 87 feet east of the centerline of the highway. 35 feet east-northeast of the northeast corner of the brick building, 10 feet southwest of the southwest rail of a railroad track and about the same elevation as the

Refers to make in manuals of triangulaters and state publications of triangulation
 Do meaters meter units when no trigonometric seveling is being done

<sup>2 (</sup>Keecinii angle measured clockwise, seterred to imital station

#### DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY, PT. NO. 32 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine YEAR: 1964

STATE: Arizona California COUNTY: Yuma Imperial

Description, including sketch of object:

Boundary Pt. No. 32 lies at the center of the Colorado River i.e., midway between the north and south shore lines just downstream from the centerline of the old U.S. Highway 80 Bridge across the Colorado River.

BDRY. PT. NO. 32 is 68.246 meters or 223.90 feet in azimuth 3° 17' 25.1" from triangulation station MISSION.

#### U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRAVERSE STATION

NAME OF STATION: BDRY PT. NO. 33 CALIF-ARIZ

YEAR: 1964

STATE: Arizona California COUNTY: Yuma Imperial

Description, including sketch of object

CHIEF OF PARTY: L. G. Burdine

The station is a standard station mark disk, stamped POINT NO 33 1964, cemented in a drill hole in the determined center of U.S. Highway 80 Bridge over the Colorado River in Yuma. The disk is 6 inches below the surface of asphalt. The center of the bridge was determined with a 300 ft. steel tape.

A traverse connection was made to triangulation station MISSION, the distance being 820.215 meters.

The geodetic azimuth from station MISSION to BDRY PT NO 33 is 91° 34° 32.0°

#### U.S. DEPARTMENT OF COMMERCE-COAST AND GEODETIC SURVEY

## DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: BDRY, PT. NO. 34 CALIF-ARIZ

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

STATE: Arizona

COUNTY: Yuma

California

Imperial

Description, including sketch of object.

Boundary Pt. No. 34 is the intersection of the centerline of the Colorado River and the International Boundary Line between California and the United Mexican States, which point is common to the boundaries of Arizona, the United Mexican States, and California. The centerline of the river as determined from this survey was based on an aerial photograph taken July 23, 1962.

Geodetic azimuth and distance from reference stations to BDRY PT NO 34:

Distance 84° 44' 16 4" feel Station meters T16S R21E S35 S22 296 21 90 284 BDRY, MON. NO. 206 US-MEXICO 265 31 35 1 313 335 1028 00 DESCRIPTIONS OF STATIONS USED AS REFERENCE FOR THE BOUNDARY POINTS WHICH WERE NOT MONUMENTED

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: BDRY, REF. PT. NO. 1A

STATE: California

COUNTY: San Bernardino

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: D. R.

Tomlinson

Note*	Height of telescope above sta	tion mark 1.61 meters, † Height of light above station mark	meters
1.4	Surface-station mark,	Distances and directions to azimuth mark, reference ma	
7b	underground-station mark	prominent objects which can be seen from the ground at t	

			Distance			
	Object	Bearing	Feet	Meters	Direction‡	
lb lb	SOTO R.M. 1 R.M. 2 R.M. 1 to R.M. 2	S NW	34.68 34.63 58.68	10,571 10,556 17,887	0° 00° 00 0° 51 40 23 167 20 46	
	BDRY REF PT. NO. 18	ERO DAD	50:00	10,000	0 27 52.8	

# Detailed description:

Station is about 11 miles north of Needles, near the state boundaries of Arizona. California and Nevada, and on the west bank of the Colorado River. This station was established to determine fixed point number one.

To reach the station from the intersection of Front and H Streets at the northwest corner of the city hall in Needles, go northwest on U.S. Highway 66 for 2.25 miles to a fork. Take the right fork, River Road and go 4.75 miles to a fork. Take the right fork, paved road and go north for 1.6 miles to a crossroad. Turn right, graveled road and go easterly for 1.05 miles to a T-road. Turn left, on graded road and go northerly along the west bank of the river for 3.35 miles to a sign "STATE OF NEVADA" and the station on the left.

Station marks are standard disks, stamped POINT NO 1 A 1964. The surface disk is set in the top of a round

Station marks are standard disks, stamped POINT NO 1 A 1964. The surface disk is set in the top of a round concrete post projecting 8 inches. It is 61 feet northwest of the sign, 16 feet west of the centerline of the road and 3.5 feet west of a witness post. The underground disk is set in an irregular mass of concrete 38 inches below the ground surface.

Reference mark I is a standard disk, stamped POINT NO 1 A NO 1 1964, set in the top of a round concrete post projecting 6 inches. It is 54 feet west-northwest of the sign, 35 feet west of the centerline of the road and about 2 feet lower than the station mark.

Reference mark 2 is a standard disk, stamped POINT NO 1 A NO 2 1964, set in the top of a round concrete post projecting 4 inches. It is 37 feet west of the centerline of the road and about 2 feet lower than the station mark.

According to computations based on the position of BDRY, PT. NO. 1, Center of Colorado River, BDRY, REF, PT. NO. 1A is 10.0 feet southwest and perpendicular to the line joining BDRY, PT. NO. 1 and BOUND-ARY POST 142 CALIF-NEV, 1893.

The geodetic azimuth and distance to BDRY PT NO. 1 are:

Animuth meters feet 313° 46′ 06.2\* 268.348 880.41

Rejerv to once, in manual, of triangulation and state publication, of triongulation.
 To negetal meser only, when no triunnometric leveling is being done.

<sup>-</sup> I Direction-angle intersured clock wise, referred to initial station-

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: BDRY, REF. PT. NO. 1B

STATE: Arizona

COUNTY: Mohave

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: D. R.

Tomlinson.

Note*	Height of telescope above station mark 1.35 meters, † Height of light above station mark me					
1a 7b	Surface-station mark, underground-station mark	Distances and direct prominent objects wh	tions to azimi ich can be see	uth mark, refe n from the gre	rence marks and ound at the station	
			Distance			
	Object	Bearing	Feet	Meters	Direction!	
115 11b	BDRY REF PT. NO. IA R.M. 1 R.M. 2 SOTO	NNE ESE	95 56 61 59 14 97	29.126 18.772 4.563	0° 00° 00 0° 62 54 43 159 17 04 74 08 44 7	

# Detailed description:

The station is about II miles north of Needles. California, near the state boundaries of California, Nevada and Arizona, and on the east bank of the Colorado River. This station was established to determine fixed point number one.

To reach the station from the intersection of Front and H Streets at the northwest corner of the city hall in Needles, California, go north on H Street, crossing the Santa Fe Railroad, for 0.15 mile to a T-road and a golf course on the north side of the intersection. Turn right and go easterly on paved road for 0.4 mile to a T-road. Turn right, south and follow along levee road for 1.0 mile to a bridge over the Colorado River. Continue ahead, crossing the bridge for 0.1 mile to a T-road. Turn left and go northwest on paved road 1.0 mile to a road fork. Take the right fork and go north on the paved road for 8.2 miles to a crossroad and sign "OATMAN-DAVIS DAM" on the right. Turn left and go west on a gravel road for 1.6 miles to a fork. Take the right fork and go northwest on a gravel road for 0.45 mile to a levee road. Turn right and go north on the levee road for 1.8 miles to a side road on the left. Turn left and go west for 0.1 mile to a T-road on the east river bank. Turn right and go north on the east bank river road for 0.1 mile to a turn-out and the station on the right.

Station marks are standard disks stamped POINT NO 1 B 1964. The surface disk is set in the top of a round

Station marks are standard disks stamped POINT NO 1 B 1964. The surface disk is set in the top of a round concrete post projecting 2 inches. It is 34 feet east of the centerline of the river road and 4 feet north of the south edge of the fill of the turn-out. The underground disk is set in an irregular mass of concrete 38 inches below the ground surface.

Reference mark I is a standard disk, stamped SOTO NO 1 1964, set in the top of a round concrete post projecting 6 inches. It is 84 feet east of the centerline of the road and about 4 feet lower than the station.

Reference mark 2 is a standard disk, stamped SOTO NO 2 1964, set in the top of a round concrete post projecting 6 inches. It is 68 feet east of the centerline of the road and about 4 feet lower than the station.

A traverse connection was made to triangulation station SOTO. The distance being 4.563 meters or 14.97 feet, north.

The geodetic azimuth and distance to BDRY, PT, NO. 1 are:

Azimuth 135° 09' 51 8" meters 273.999 feet 898. 95

Distance

Refers to notes in manuals of triangulation and state podicioninal triangulation.
• To manual mass only, when no triangulation leveling is being done.

<sup>2</sup> Direction-angle measured clinckwise, referred to initial station.

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: REFUGE STATE: Arizona COUNTY: Mohave

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 DESCRIBED BY: D. J. Novak

Note*	Height of telescope above sta	ight of telescope above station mark 1.74 meters, † Height of light above station mark				
+	Surface-station mark, underground-station mark	Distances and direct prominent objects whi	tions to azim ch can be see	uth mark, refe on from the gr	erence marks and ound at the station	
			Distance			
	Object	Bearing	Feet	Meters	Direction‡	
12c 12c	BREEZE 1934 R.M. 1 R.M. 2	W NNW	47.59 74.48	14 305 23 617	00° 00′ 00 0° 261 39 24 306 30 47	

## Detailed description:

The station is located about 10 miles southeast of Needles, about 1 mile northwest of Topock and about 0.2 mile southwest of the Colorage River.

To reach the station from the post office in Topock, go west on U.S. Highway 66 for 0.55 mile to a railroad underpass. Continue northerly on Highway 66 for 0.4 mile to the station on the left.

The station mark, a standard disk stamped "REFUGE 1964", is cemented in a drill hole in a boulder that is flush with the surface of the ground. It is 93 feet southwest of the center of U.S. Highway 66, 32 feet northwest of the southeast edge of a wash and 4 feet southeast of a metal witness post.

Reference mark L a standard disk stamped "REFUGE NO 1 1964", is comented in a drill hole in a boulder that projects 10 inches above ground surface. It is 135 feet southwest of the center of U.S. Highway 66, 45 feet northwest of the southeast edge of the wash, 44 feet west of the metal witness post and about 4 feet higher in elevation than the station.

Reference mark 2, a standard disk stamped "REFUGE NO 2 1964", is cemented in a drill hole in a boulder that projects I foot above ground surface. It is 112 feet southwest of the center of U.S. Highway 66, 73.5 feet northwest of the metal witness post and about 3 feet higher in elevation than the station.

No azimuth mark was established at this station.

This station was used to locate BDRY, PT. NO. 2 CALIF-ARIZ which is in the center of the channel of the Colorado River

Refert to notes in manuals of triangulation and state publications of triangulation.

1 Direction angle measured clockwise, referred to initial station.

To dearest meter only, a new 46 triponometric leveling is being dose.

## DESCRIPTION OF TRIANGULATION STATION

Name of Station: DOCK State: Arizona County: Yuma

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 DESCRIBED BY: B. R. Lewis

Height of telescope above station mark 1.00 meters. † Height of light above station mark

Desc. Surface-station mark, Distances and directions to azimuth mark, reference marks and underground-station mark prominent objects which can be seen from the ground at the station.

Distance

Object Bearing Feet Meters Direction1 FILL. 00 00 00 Reference Mark No. 1 21 16 6 451 245 49 01 Reference Mark No. 2 WSW 21.10 6 433 340 29 17

# Detailed description:

Desc.

Desc.

Note\*

The station is located about 2 miles northeast of Parker, 2 miles east of Earp, California, and on the southeast shore line of the Colorado River. It is inside the fenced area of the Blue Water Marine Park on property of the Colorado River Indian Reservation.

To reach the station from the intersection of California Avenue and River Side Road (Spur 95 and State Highway 95) in Parker, go northeasterly on River Side Road (State Highway 95) for 1.95 miles to the west entrance gate of the Blue Water Marine Park on the left. Turn left, passing through the gate, and go northeast for 0.05 mile to the Judges Stand and the station on the northeast corner as described.

The station mark is a standard disk cemented in a drill hole, set flush with the concrete foundation and is stamped DOCK 1964. It is 2.6 feet north of the north corner of the Judges Stand. 1.8 feet southwest of the northeast edge and 1.8 feet southeast of the northwest edge of the foundation.

Reference mark No. 1 is a standard disk cemented in a drill hole, set flush with the concrete foundation and is stamped DOCK NO 1 1964. It is 3.8 feet east of the east corner of the Judges Stand, 1 foot southwest of the northeast edge and 1 foot northwest of the southeast edge of the foundation.

Reference mark No. 2 is a standard disk cemented in a drill hole, set flush with the concrete foundation and is stamped DOCK NO 2 1964. It is 3.8 feet west of the west corner of the Judges Stand. 1 foot southeast of the northwest edge and 1 foot northeast of the southwest edge of the foundation.

No szimuth mark was set for this station.

This station was used to locate BDRY. PT. NO. 7 CALIF-ARIZ which is in the center of the Colorado River.

Refers to cores in manuals of triangulation and state publications of triangulation.
 To nearest morest only, when no triprocumetric leveling is being done.

C Direction male measured concerne, referred in minial marine.

## DESCRIPTION OF TRIANGULATION STATION

Height of telescope above station mark 6.03 meters, † Height of light above station mark

NAME OF STATION: FLAT STATE: California County: San Bernardino

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 DESCRIBED BY: D. R. Tomlinson

1a 7b	Surface-station mark, underground-station mark				erence marks and ound at the station
			Dist	tance	
	Object	Bearing	Feet	Meters	Direction‡
1b	WATHEN R.M. 1 R.M. 2	SE SW	50,83 55,20	15, 493 16, 825	0° 00′ 00 0° 54 14 23 145 59 22

## Detailed description:

Note"

Station is about 112 miles north of the center of Parket. Arizona, I mile northeast of Earp, California, 12 mile west of the earth fill of Headgate Rock Dam and on a silt, grass and brush covered area of the Colorado River.

To reach from the Arizona Inspection Station in the northwest edge of Parker. Arizona, go northwest on State Highway 95 for 0.75 mile to a T-intersection. Turn right and go easterly on paved road for 1.0 mile to a track road right. Turn right and follow track road toward river for 0.1 mile to the end of track road at river bank and end of truck travel. The station is about 75 yards south in the old river bed.

Station marks are standard disks, stamped FLAT 1964. The surface disk is set in the top of a round concrete post projecting 8 inches. It is 2 feet west of a witness post. The underground disk is set in an irregular mass of concrete 58 inches below the ground surface.

Reference mark I is a standard disk, stamped FLAT NO I 1964, set in the top of a round concrete post projecting 8 inches. It is about the same elevation as the station.

Reference mark 2 is a standard disk, stamped FLAT NO 2 1964, set in the top of a round concrete post projecting 10 inches. It is about the same elevation as the station.

This station was used to locate BDRY, PT. NO. 9 CALIF-ARIZ which lies on the centerline of the Colorado River.

meters.

Refers to notes in manuals of transpulation and state publications of remarkables.
 To makest meter only, when an argumometric leveling is being done.

<sup>3</sup> Direction andir measured clockwise, referred in initial station.

#### DESCRIPTION OF TRIANGULATION STATION

Height of telescope above station mark 1.62 meters, † Height of light above station mark

NAME OF STATION: VIEW

Note\*

STATE California

COUNTY: San Bernardino

meters.

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: I.E.F.

1b 7a	Surface-station mark, underground-station mark	Distances and direct prominent objects wh	ctions to azim	outh mark, refe en from the gr	rence marks and ound at the station
			Di	stance	
	Object	Bearing	Feet	Meters	Direction1
11b 11b	FLAT Parker, Municipal Tank, Elevi Reference mark No. 1 Reference mark No. 2 R.M. 1-R.M. 2	ated S SW NW	Approx. 44.46 50.30 73.30	2 miles 13,552 15,331 22,343	0° 00' 00.00° 119 03 57.4 171 35 44 272 45 30

# Detailed description:

The station is about 1% miles north-northwest of Parker, Arizons, 0.1 mile northeast of the River View Trailer Park, on the crest of a low bluff at the northwest side of the Colorado River and on land of the Colorado River Indian Reservation.

To reach the station from the post office in Parker, Arizona, go northwest on Joshua Ave. for 50 yards to Arizona Ave.: turn right and go northeast on Arizona Ave. for 0.1 mile to California Ave. (State Highway 95). Turn left and go northwest on Highway 95 for 0.2 mile to where Highway 95 turns to the right; continue northwest on State Spur 95 for 0.8 mile to a bridge across the Colorado River. Cross the bridge and go northerly for 0.5 mile to a T-road. Turn right and go easterly on a paved road for 0.25 mile to the entrance to the River View Trailer Park on the right; continue easterly on the paved road for 0.3 mile to a track road on the right. Turn right and go southeast on the track road for 30 feet to a fork; take right fork and go 250 feet to a track road on the right. Turn right and go westerly on the track road for 0.05 mile to the northwest base of the bluff; turn left, go uphill and along the top of the bluff for 0.05 mile to the southeast end of the bluff and the station.

Station marks are standard disks stamped VIEW 1964. The surface disk is set in a round concrete post which projects 3 inches. It is 38 feet west of the southeast edge of the bluff and 4.2 feet north of a metal witness post. The underground disk is set in an irregular mass of concrete 40 inches below the surface of the ground.

Reference mark No. I, a standard disk stamped VIEW NO I 1964, is set in a round concrete post which projects 4 inches. It is 30 feet west of the southeast edge of the bluff and about the same elevation as the station.

Reference mark No. 2, a standard disk stamped VIEW NO 2 1964, is set in a round concrete post which projects 4 inches. It is 7 feet southwest of the north-northeast edge of the bluff and about the same elevation as the station.

Note: An azimuth mark was not set for this station. Reference marks were measured using 5 kg, tape tension.

This station was used to locate BDRY, PT. NO. 10 CALIF-ARIZ which is in the center of the Colorado River.

Refers to notes in manuals of strangulation and state publications of triangulation.
 To nearest energy only, when no trigonometer, breeling is being done.

<sup>2</sup> Direction-angle hista-und stockwise, referred to initial station.

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: SQUAW

STATE: Arizona

COUNTY: Yuma

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: C M Call

also com	ARTH BOOK BUILDING	1500		KINGD B1. C.	
Note*	Height of telescope above sta	tion mark 1.51 meters,	Height of ligh	nt above statio	n mark meter
2	Surface-station mark, underground-station mark	Distances and dire prominent objects w	ections to azim hich can be se	outh mark, ref en from the gr	erence marks and round at the station
	armen .		Dis	tance	
	Object	Bearing	Feet	Meters	Direction‡
12 a 12 a	IMPERIAL Reference Mark No. 2 Reference Mark No. 1	NW E	32.12 44.89	9 .790 13 .683	00° 00′ 00.0° 140 52 15 273 43 02

## Detailed description:

The station is located 19 miles northwest of Laguna, 15 miles northeast of Yuma, and 13; miles north of Imperial Dam. It is on land of the Imperial National Wildlife Refuge, on a small island about 100 feet in diameter, in the Colorado River and nearer the Arizona shore.

To reach the station from the Bureau of Reclamation boathouse which is 0.1 mile north of the Water Control Communications Headquarters building at the west end of Imperial Dam, go north by boat by various river channels for 132 miles to the island on the starboard side. The best landing point is at an opening in the reeds on the northwest side of the island.

The station mark is a standard disk stamped SQUAW 1964 cemented in a drill hole in a depression in decomposed bedrock. It is about 4 inches below the surrounding surface and about 12 feet above the surface of the river.

Reference mark number one is a standard disk stamped SQUAW NO 1 1964 cemented in a drill hole in decomposed bedrock held together with cement flush with the surrounding surface. It is on the highest point of the island and is about I foot higher than station elevation.

Reference mark number two is a standard disk stamped SQUAW NO 2 1964 cemented in a drill hole in a little ridge of jagged bedrock. It is on the northwest slope of the island and about 2 feet lower than the station mark. This station was used to locate BDRY PT. NO. 15 CALIF-ARIZ which lies on the centerline of the Colorado River

Refers to notes in manuals of transmittion and state publications of transpulation.
 To nearest meter only, when on transmitted prelime is being done.

<sup>2</sup> Direction-angle measured cookwise, referred to thitial yeatons.

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: MITTRY

STATE: California

COUNTY: Imperial

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: W. V. Mast

Note*	Height of telescope above sta	tion mark 19.34	meters,	† Height of ligh	nt above stati	on mark	mete
desc.	Surface-station mark, underground-station mark			tions to azimu			
	1			Dist	ance		
	Object	P	learing	Feet	Meters	Dire	ction‡
desc.	SUGARLOAF 2 (USE) R.M. 2 BLM Sec. Mark T15S R24E		NW	62.60	19.079	00° 00 125 5	0' 00 0' 7 36
desc.	(Azimuth Mark) R.M. 1 R.M. 1 to R.M. 2		N NE	0.3 mile 58.51 89.21	17.834 27.192	162 4 220 4	9 53 S 8 36
	BDRY, PT. NO. 17 CALI	F-ARIZ		07.21	42.682	167 4	5 21

# Detailed description:

The station is located in a sandy brush covered area between the All American Canal and the Colorado River. It is presently in California about 2.65 miles south-southwest of Imperial Dam, 2.15 miles northeast of the center of Laguna Dam, 2.0 miles southwest of the Yuma Proving Ground Headquarters and 45 mile west of the west bank of the Colorado River.

To reach the station from Imperial Dam, drive south along the west side of the Colorado River for 0.6 mile to a side road left. Turn left, go east and south along the west side of a canal for 0.5 mile to a side road right and a dike crossing the canal on the left. Turn left, cross the canal on the dike road, thence turn right and go south along the east side of the canal for 0.4 mile to a side road left. Turn left, go east and southeast on a track road through dense brush for 0.3 mile to a T-road. Turn right, go south on a track road for 0.25 mile to a fork. Take the right fork, continue south on the track road for 0.35 mile to a crossroad and the azimuth mark in the northwest angle. Continue south on the track road for 0.3 mile to a crossroad and the station in the southeast angle.

The station mark is a standard disk, stamped MITTRY 1964, brazed to the top of a 2-inch galvanized pipe which projects 10 inches above the ground surface. It is 70 feet south of the center of an east-west track road, 53 feet east of the center of a north-south track road and 2.6 feet northwest of a metal witness post with a sign attached.

Reference mark I is a standard disk, stamped MITTRY NO 1 1964, brazed to the top of a 2-inch galvanized pipe which projects 8 inches above the ground surface. It is 57.6 feet northeast of a metal witness post with a sign attached and 15 feet southwest of the center of the east-west track road.

Reference mark 2 is a standard disk, stamped MITTRY NO 2 1964, brazed to the top of a 2-inch galvanized pipe which projects 8 inches above the ground surface. It is 65 feet northwest of a metal witness post with a sign attached and 11 feet east of the center of the north-south track road.

The azimuth mark is a Bureau of Land Management pipe mark with the cap type disk riveted to the top of a 2½ inch galvanized pipe which projects 8 inches above the ground surface. It is 14 feet north of an east-west track road, 8 feet west of the center of a north-south track road and 0.4 foot north of a 4 × 4 inch witness post. The disk is stamped T15S R24E S20 S21 S29 S28 1961.

This station was used as a reference for BDRY, PT. NO. 17 CALIF-ARIZ. See description of BDRY, PT. 17.

Refere to once in manuals of triangulation and state publications of exangulation.
 To nearest inster only, when no origonometric leveling is lieing done.

<sup>#</sup> Direction-analy incarned viocewise, intered in initial region.

#### DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: KOOL STATE: Arizona County: Yuma

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 DESCRIBED BY: J. W. Quesinberry

Note*	Height of telescope above station m		19.29 meters,	† Height of li	ght above stati	on mark meter	
desc.	Surface-station mark, underground-station mark	Distan prominer	nces and directs wh	ctions to azin	nuth mark, referent from the gr	erence marks and ound at the station	
				Distance			
	Object		Bearing	Feet	Meters	Direction:	
desc. desc. desc.	DELTA (USGS) R. M. No. 1 Azimuth Mark R. M. No. 2		NE E SW	94.41 Approx. 101.96	28 777 1.0 mile 31.080	0° 00° 00 00° 67 54 29 113 32 27.9 264 00 32	

## Detailed description

The station is located about 9 miles northeast of Yuma, 5 miles southwest of Yuma Proving Ground Head-

quarters, I mile southwest of Laguna Dam and on the east bank of the Colorado River.

To reach the station from the main entrance to the Yuma Proving Ground Headquarters, go west on a black top road for 0.2 mile to a crossroad at the west end of a bridge over a canal. Turn left and go south along the west side of the canal on a gravel road for 6.0 miles to a flood gate on the right. Continue south on the gravel road for 0.15 mile to a side road and canal on the right. Turn right and go west along the north side of the canal on a dirt road for 0.25 mile to the azimuth mark on the right. Continue west on the dirt road for 0.65 mile to a side road and irrigation ditch on the right. (Note: In the event the field is flooded for irrigation it will be a pack from this point.) Turn right and go southwest along the top of a dike for 0.2 mile, thence south along the top of a sandy dike for 0.1 mile to the station on the left.

The station mark, a standard disk stamped KOOL 1964, is brazed to the top end of a 2-inch cast iron pipe set in concrete and projects I foot above the ground surface. It is 31 feet northwest of the northwest edge of a cul-

tivated field. 17 feet southeast of the west edge of a bank and 1.6 feet south of a metal witness post.

Reference mark 1, a standard disk stamped KOOL NO 1 1964, is brazed to the top end of a 2-inch cast iron pipe set in concrete and projects 4 inches above the ground surface. It is 94.5 feet north of the metal witness post, 49 feet northwest of the northwest edge of the cultivated field, 7 feet southeast of the west edge of the bank and 1 foot northwest of a metal post.

Reference mark 2, a standard disk stamped KOOL NO 2 1964, is brazed to the top end of a 2-inch cast iron pipe set in concrete and projects 1 foot above the ground surface. It is 105 feet southwest of the metal witness post, 47 feet northwest of the northwest edge of the cultivated field, 10 feet southeast of the west edge of the bank.

and I foot northwest of a metal post.

Azimuth mark, a standard disk stamped KOOL 1964, is brazed to the top end of a 2-inch cast iron pipe set in concrete and projects 3 inches above the ground surface. It is 70 feet north of the north edge of a canal, 58 feet north of the center of a dirt road, 2 feet south of a telephone pole and 1.7 feet north of a metal witness post.

Observation was made from a 64 foot tower.

Note: A four wheel drive vehicle required.

This station was used to locate BDRY. PT. NO. 19 CALIF-ARIZ which lies on the centerline of the Colorado River.

<sup>\*</sup> Refers to notes on manuals of transmission and state publications of triangulation.

To rearest meter only, when so trigocometric leveling is being done.

<sup>2</sup> Threeting adule measured obsessue, referred to mittel station

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: T8S R22W WS4 PS9 (BLM)

STATE: Arizona

COUNTY: Yuma

CHIEF OF PARTY: L. G. Burdine

YEAR: 1964

DESCRIBED BY: I. W. Quesinberry

Note*	Height of telescope above sta	tion mark 19.66 meters, †	Height of lig	ht above stati	on mark meter
desc	Surface-station mark, underground-station mark	Distances and direct prominent objects which	ions to azimu ch can be see	uth mark, refe n from the gr	rence marks and ound at the station
	1		Dist	ance	
	Object	Bearing	Feet	Meters	Direction:
11b 11b	SUGARLOAF 2 (USE) R. M. No. 1 R. M. No. 2	E NNW	74.82 88.70	22, 805 27, 034	0° 00° 00.00° 39 31 02 300 25 38

## Detailed description:

The station is located about 5 miles south-southwest of the main blacktop road leading to Laguna Dam, 4 miles north of U.S. Highway 95, at the section line between Section 4 and 9, E-W. Runge 22 W of the Salt River

and Gila Meridian and on the east bank of the Colorado River-

To reach the station from the junction of U.S. Highways 95 and 80 at the south edge of Yuma, go east on highway 95 for 6.6 miles to a crossroad at the Winne Gila Store. Turn left and go north on a blacktop road for 4.1 miles to a crossroad. Turn left and go west on a dirt road for 0.6 mile to side road left. Turn left cross over a canal, take left fork and go about 100 feet to a fork. Take left fork and go west on a gravel road for 0.05 mile to a earth bridge over a canal. Turn left cross the bridge thence west and south on a field road for 0.2 mile to the station near a dump area.

Station mark, a U.S. Dept. of The Interior Bur. of Land Management Cadastral Survey disk, stamped T8S R22W WS4 PS9 1960, is riveted to the top end of a 2-inch cast iron pipe set in concrete and projects 3 inches above the ground surface. It is 62 feet north of the north edge of a canal, 39 feet west of the center of a track

toad and 30 feet east of the east edge of the river bank.

Reference mark 1, a standard disk stamped T8S R22W WS4 PS9 NO 1 1964, is set in the top of a 12-inch round concrete monument that projects 3 inches above the ground surface. It is 36 feet east of the center of the track road, 24 feet north of the north edge of the canal, 1.7 feet north of a metal witness post and about 2 feet higher

in elevation than the station.

Reference mark 2, a standard disk stamped T85 R22W WS4 PS9 NO 2 1964, is set in the top of a 12-inch round concrete monument that projects 4 inches above the ground surface. It is 23 feet east of the east edge of the river bank, 8 feet west of the center of the track road, 1.7 feet south of a metal witness post and about the same elevation as the station.

Note: No azimuth mark established at this station. Observations were made from a 64 foot tower.

This station was used to locate BDRY, PT. NO. 20 CALIF-ARIZ which lies on the centerline of the Colorado River.

Refers to motes in manuals of triangulation and state publications of triangulation.
 To measure materiolity, when no trigonometric leveling is being done.

<sup>2</sup> Direction-angle measured clockwise, referred = initial statum.

#### DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: MISSION STATE: Arizona County: Yuma

CHIEF OF PARTY: L. G. Burdine YEAR: 1964 DESCRIBED BY: C. M. Call

Note*	Height of telescope above sta	tion mark 1.74 meters, †	Height of ligh	it above statio	n mark meters.
1 b 7 a	Surface-station mark, underground-station mark	Distances and direct prominent objects whi			
			Dis	tance	
	Object	Bearing	Feet	Meters	Direction 1
	SUGARLOAF 2 (USE) Reference Mark No. 1 T16S R22E S35 S36 Reference Mark No. 2	ESE S WSW	26.32 10.68 33.97	8 022 3 256 10 355	00° 00′ 00.0° 57 12 03 119 21 194 51 08

## Detailed description:

The station is located at the north edge of the city of Yuma on top of a small, bare, flat-topped, gravel and rock knoll on land of the Yuma Indian Reservation. It is about 0.2 mile south of the buildings of the Government Indian School and the Purisima Conception Mission and on or close to the line between Points 31 and 32 of the Interstate Boundary Compact. The knoll is on the north side of the Colorado River about 80 feet above the water and is cut on its east and north sides by the roadway of old U.S. Highway 80.

To reach the station from the city hall in Yuma, go east on 1st Street to Penetentiary Avenue; turn left and go north on Penetentiary Avenue 0.6 mile to a fork at the north end of the Colorado River bridge. Continue northwest 0.1 mile to the second side road on the left at an old building foundation; turn left and go south 100 feet to steep gravel road up onto knoll and the station.

The station mark is a standard disk stamped MISSION 1964 set in the top of a 12-inch cylindrical concrete monument set flush with the ground. It is 40.6 feet west of the east edge of the bluff and 10.7 feet north of a rock retaining wall.

Reference mark number one is a standard disk stamped MISSION NO 1 1964 cemented in a drill hole flush with the top of a rock retaining wall. It is 5.1 feet west of the east end of the wall, 0.9 foot north of the south edge of the wall, and at the same elevation as the station.

Reference mark number two is a standard disk stamped MISSION NO 2 1964 cemented in a drill hole flush with the top of a rock retaining wall. It is 3.2 feet east of the west end of the wall and at the same elevation as the station.

A General Land Office Survey disk stamped T16S R22E S55 S36 MC WC 49 is cemented in a drill hole flush with the surface of the retaining wall. A distance was measured to the "T" on the disk but it was too close to focus for a closer angle measurement.

This station was used to locate BDRY, PT. NO. 32 CALIF-ARIZ which is in the center of the Colorado River.

<sup>\*</sup> Refers to notes in manuals of triangulation and state mobilizations of triangulation. To nearest meter only, when no triangulation leveling is being done.

<sup>2</sup> Direction-angle measured clockwise, referred to stitus statum

## DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: T165 R21E S35 S22 (BLM) STATE: Arizona

COUNTY: Yuma

CHIEF OF PARTY: L. G. Burdine DESCRIBED BY: J.E.F. YEAR: 1964

Note\* Height of telescope above station mark 3.50 meters, † Height of light above station mark meters. Pipe Surface-station mark. Distances and directions to azimuth mark, reference marks and prominent objects which can be seen from the ground at the station underground-station mark

			Dist	ance	
	Object	Bearing	Feet	Meters	Direction‡
i i	WEST PILOT 1934 Reference mark No. 1 Yuma, Municipal Standpipe (light) Reference mark No. 2 BDRY MON, NO. 206 US-MEXICO	E E S 1910	57_13 6.0 miles 74.03	17 414 22 565 403 612	0° 00' 00 00" 152 23 03 157 50 00 5 268 46 14 329 36 54 5

## Detailed description:

116 Hb

The station is about 53, miles west of Yums and on the east shore of the Colorado River, 80 feet east of a

gauging station.

To reach the station from the Yuma City Hall, go west on 1st street 0.2 mile to 4th Ave.: turn left and go south on 4th Ave. U.S mile to 8th street. Turn right and go west on 8th street 5.3 miles to a crossroad; continue west on a gravel road 0.6 mile to a railroad track. Cross the railroad track, then turn right and go northerly on a levee road 0.5 mile to a side road on the left; turn left and go west on a dirt road 0.2 mile to a T-road, two large cottonwood trees on the left and the station west of the intersection.

Station mark is a U.S. Bureau Of Land Management Cadastral Survey Disk stamped T16S, R21E, WC S35, MC 522, T8S. R24W, 61, rivered to a 112 inch galvanized pipe projecting 8 inches above the surface of the ground. It is 18 feet west of the center of a metal gate, 5.5 feet north of a wire fence, and 5 feet east of a telephone pole.

Reference mark No. 1, a standard disk stamped \$35 \$22 BLM NO 1 1964, is set in a concrete cylinder 12 inches in diameter and projects 3 inches above the surface of the ground. It is 26 feet southeast of the road intersection,

I foot southwest of a metal witness post with sign, and 6 inches northwest of a woven wire fence.

Reference mark No. 2, a standard disk stamped S35 S22 BLM NO 2 1964, is set in a concrete cylinder 12 inches in diameter and projects 2 inches above the surface of the ground. It is 10 feet east of the center of a gravel road

and 6 inches west of a wire fence. This station was used to locate BDRY, PT. NO. 34 CALIF-ARIZ which lies on the centerline of the Colorado River,

<sup>\*</sup> Refers to make in manual. At transpolation and date medication, or terracianes. The nextens make make and transpolation and in being done

<sup>1</sup> Direction universal consessed consessed to initial states.

ADJUSTED HORIZONTAL CONTROL DATA FOR BOUNDARY POINTS AND FOR BOUNDARY POINT REFERENCE STATIONS

# ADJUSTED HORIZONTAL CONTROL DATA

SAME OF STATION: BORY REF PT NO 14

STATE CALIFORNIA-NEVADA YEAR: 1964

SECOND -ORDER

LOCALITY ARIZONA-CALIFORNIA ROUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-1

GEODETIC LATITUTE: 35 00 12-45882 ELEVATION: METERS.
GEODETIC LONGITUDE: 114 38 03-31001 FEET

		STATE COORDINATES	Feet)	
STATE & ZONE	CODE	×	Y	$\theta$ (or $\Delta$ $\alpha$ ) angle
ARIZ. W. CALIF. V NEV. E.	0203 0405 2701	235,184-24 3,007,769-35 784,221-48	1,457,728.62 564,010.62 93,590.84	- 00 30 26 + 01 55 07 + 00 32 40

TO STATION	TOBLEO RO P	GEODETIC AZIM (Frequestric)	(From south)	CODE
BDRY REF PT NO 1 BDRY REF PT NO 1 BDRY REF PT NO 1	В	314 28 20. 314 28 20. 314 28 20.	.7 312 33 14	0203 0405 2701

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BORY REF PT NO 18

STATE ARIZONA

YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE G-13386

FIELD SKETCH: ARIZ 52-1

GEODETIC LATITUTE: 35 00 00-12984 ELEVATION: METERS
GEODETIC LONGITUDE: 114 37 48-04945 FEET

STATE COORDINATES (Fat)							
STATE & ZONE	CODE	х	Υ.	θ (OR Δ α) ANGLE			
ARIZ. W. CALIF. V NEV. E.	0203 0405 2701	236,442.79 3,009,079.90 785,502.87	1,456,470.95 562,807.45 92,356.51	- 00 30 17 + 01 55 15 + 00 32 49			

		TO	STATE	ON OR OBJECT		parb)	PLANE AZ	C. S. Williams C. S.	CODE
BDRY	REF	PŤ	NO	14	134 28	29.5	134 58	47	0203
BDRY			NO		134 21	29.5	132 33	15	0405
BDRY	REF	PT	NO	1A	134 21	29.5	133 55	41	2701

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: DOCK

STATE ARIZONA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-1

GEODETIC LATITUTE: 34 10 09-30826 GEODETIC LONGITUDE: 114 16 01-35839

ELEVATION:

METERS FEET

		STATE COORDINATES	Feet)	
STATE & ZONE	CODE	×	¥	$\theta$ (or $\Delta$ $\alpha$ ) angle
ARIZ. W. CALIF. V	0203 0405	343,602.04 3,128,942.45	1,153,368.91 264,518.02	- 00 17 25 + 02 07 40

TO STATION OR OBJECT	(Frem Jayah)	(From wush)	CODE
FILL	94 29 08.4	94 46 33	0203
	94 29 08.4	92 21 28	0405

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION FLAT

STATE CALIFORNIA

YEAR: 1964

SECOND -ORDER

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-1

GEODETIC LATITUTE: 34 10 16-61734
GEODETIC LONGITUDE: 114 17 11-37843

ELEVATION: METERS
FEET

		STATE COORDINATES	Feet)	
STATE & TONE	CODE	x	Y	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. V	0203 0405	337,722.53 3,123,035.66	1,154,138.12 265,038.47	- 00 18 05 + 02 07 00

(Fram south)	(From south)	CODE
	264 34 35 262 09 30	0203 0405
	264 16 29.9 264 16 29.9	264 16 29.9 264 34 35

 $\nabla$ 

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: KOOL

STATE ARIZONA YEAR: 1964 SECOND-ORDER

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE G-13386 FIELD SKETCH: ARIZ 52-II

GEODETIC LATITUTE:	32 48 54-14142	ELEVATION	METERS
GEODETIC LONGITUDE:	114 30 25.84327		FEET

				100
STATE & ZONE	CODE	*	( <b>X</b> )	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. VI	0203 0406	267,370.11 2,535,452.87	661,071,42 240,380,55	- 00 24 37 + 00 57 28

TO STATION OR OBJECT	(From south)	PLANE AZIMUTH (From 19416)	CODE
AZIMUTH MARK AZIMUTH MARK	267 22 18.5 267 22 18.5	267 46 56 266 24 51	0203 0406

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: MISSION

STATE ARIZONA YEAR: 1964

SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-11

GEODETIC LATITUTE ELEVATION: 32 43 44.64841 METERS GEODETIC LONGITUDE: 114 36 54.06437 FEET

STATE COORDINATES (Fet)				
STATE & ZONE	CODE	×	Y	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. VI	0203 0406	233,981.80 2,502,814.34	630,047-29 208,568-71	- 00 28 04 + 00 53 54

(From south)	(From seath)	CODE
240 17 41.8 240 17 41.8	240 45 46 239 23 48	0203
	(From saulo) 240 17 41 8	(From south) (From south) 240 17 41 8 240 45 46

 $\nabla$ 

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: MITTRY

STATE CALIFORNIA YEAR: 1964

SECOND-DRDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-11

GEODETIC LATITUTE: 32 50 38.49534 ELEVATION: METERS GEODETIC LONGITUDE: 114 28 06-30594 FEET

		SOURCE SELECTION OF THE PERSON		
STATE & ZONE	CODE	×	Y	8 (OR A &) ANGLE
ARIZ. W. CALIF. VI	0203 0406	279,350.53 2,547,180.01	671.534.59 251.126.83	- 00 23 23 + 00 58 44

(Fmm much)	PLANE AZIMUTH (From walk)	CODE
177 45 28.7 177 45 28.7	178 08 52 176 46 45	0203
	(Fran (such)	(Fram south) (Fram south)

#### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION! REFUGE

STATE CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-1

GEODETIC LATITUTE: 34 43 23.99286 GEODETIC LONGITUDE: 114 29 32-46678

ELEVATION:

METERS FEET

STATE COORDINATES (Fail)				
STATE & ZONE	CODE	×	*	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. V	0203 0405	276,926.45 3,053,797.17	1,355,430.62 463,577.27	- 00 25 22 + 01 59 58

(Fran Justin)	(From south)	CODE
195 46 20.9 195 46 20.9	196 11 43 193 46 23	0203
	195 46 20.9	(Fran south) (Fran south)

## ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: SQUAW

STATE ARIZONA

YEAR: 1964

SECOND -ORDER

METERS

FEET

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCHI ARIZ 52-II

GEODETIC LATITUTE: 32 54 30.83248 ELEVATION: GEODETIC LONGITUDE: 114 27 41.36270

STATE COORDINATES (Fell)				
STATE & ZONE	CODE	×	(♥:	$\theta$ (OR $\Delta$ $\alpha$ ) ANGLE
ARIZ. W. CALIF. VI	0203 0406	281,636.87 2,548,905.05	695,000.95 274,641.06	- 00 23 12 + 00 58 58

TO STATION OR OBJECT	GEODETIC AZIMUTH (Fram, jourb)	PLANE AZIMUTH (From louib)	CODE
IMPERIAL IMPERIAL	0 04 31.2 0 04 31.2	0 27 43 359 05 33	0203 0406

NAME OF STATION: VIEW

STATE CALIFORNIA

YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCHT ARIZ 52-1

GEODETIC LATITUTE: 34 10 00.84448
GEODETIC LONGITUDE: 114 17 35.21757

FEET

STATE COORDINATES (Fm)				
STATE & ZONE	CODE	×	¥	$\theta$ (or $\Delta$ $\alpha$ ) angle
ARIZ. W. CALIF. V	0203 0405	335,711.02 3,121,092.73	1,152,554.35 263,371.22	- 00 18 18 + 02 06 47

(From jourh)	(Fram south)	CODE
231 28 47.0 231 28 47.0	231 47 05 229 22 00	0203 0405
	(From south)	(From south) (From south) 231 28 47.0 231 47 05

NAME OF STATION: TBS RZZW WS4 PS9

STATE ARIZONA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-II

GEODETIC LATITUTE: 32 45 25.84204 GEODETIC LONGITUDE: 114 31 27-71824

ELEVATION

METERS FRET

STATE COORDINATES (FM)				
STATE & ZONE	CODE	×	¥	$\theta$ (OR $\Delta$ $\alpha$ ) ANGLE
ARIZ. W. CALIF. VI	0203 0406	261,935.36 2,530,521.19	640,058.43 219,243.76	- 00 25 08 + 00 56 54

TO STATION OR OBJECT	(From spath)	(Fram seath)	CODE
SUGARLOAF 2 USE	223 58 42.4	224 23 50	0203
	223 58 42.4	223 01 48	0406

NAME OF STATION: T16S R21E S35 S22

STATE ARIZONA YEAR: 1964 SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-11

GEODETIC LATITUTE: 32 43 07-55671 ELEVATION: METERS GEODETIC LONGITUDE: 114 43 03.89804 FEET

STATE & ZONE	CODE	x	Y	8 (OR A a) ANGLE
ARIZ. W.	0203	202,353,44	626,571.91	- 00 31 23
CALIF. VI	0406	2,471,278,22	204,340.59	+ 00 50 31

TO STATION O	OR OBJECT		TIC ON S	AZIMUTH nutô)		E AZIMUTH m south)	CODE
BOUNDARY MONUMENT	M. Carta I Mickel, Str. 211	ACTOR A		06.6	0.0000	52 30 30 36	0203

NAME OF STATION: BDRY PT NO 1 CENTER OF COLORADO RIVER ARIZ-CALIF-NEV
STATE ARIZ-CALIF-NEVADA YEAR: 1893, 1964 THIRD -ORDER

LOCALITY: CALIFORNIA-NEVADA BOUNDARY

SOURCE: G-10055, G-13386

GEODETIC LATITUTE:	35 00 06.43500	ELEVATION:	METERS
GEODETIC LONGITUDE:	114 37 55-66800	AND RESIDENCE OF STREET	FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	×	V.	$\theta$ (or $\Delta$ $\alpha$ ) angle
ARIZ. W. CALIF. V NEV. E.	0203 0405 2701	235,814.61 3,008,425.11 784,863.01	1,457,113,99 563,423,29 92,987,90	+ 00 30 22 + 01 55 11 + 00 32 44

TO STATION OR OBJECT	GEODETIC AZIMUTH	PLANE AZIMUTH (From south)	CODE
	The Part of the Pa	e in the second	
	-115 (105/01/04)		

#### $\nabla$

### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION | EDRY PT NO 2 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: 0-13386

FIELD SKETCH: #

GEODETIC LATITUTE:	34 43 28 68990	ELEVATION:	METERS
GEODETIC LONGITUDE:	114 29 24.59080		FEET

STATE COORDINATES (Fee)					
STATE & ZONE	CODE	×	Y	θ (OR Δ α) ANGLE	
ARIZ W. CALIF V	0203 0405	277,587.37 3,054,437.59	1,355,900.62 464,074.75	- 0 25 18 + 2 00 02	

TO STATION OR OBJECT	GEODETIC AZIMUTH (From wath)	PLANE AZIMUTH (From south)	CODE
This station was determined by photogrammetric methods and is referenced from triangulation station REFUGE (*Ariz. 52-I).	381 Y 280		

#### ADJUSTED HORIZONTAL CONTROL DATA

SECOND -ORDER

NAME OF STATION: BDRY PT NO 3 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-I

NO CHECK ON THIS POSITION

GEODETIC LATITUTE: 34 43 05.36265 ELEVATION: METERS GEODETIC LONGITUDE: 114 29 15.20339 FEET

STATE COORDINATES (Fmt)				
STATE & ZONE	COPE	x	Y	$\theta$ (or $\Delta$ $\alpha$ ) angle
ARIZ. W. CALIF. V	0203 0405	278,353.66 3,055,303.05	1,353,536.62 461,745.41	- 00 25 12 + 02 00 08

TO STATION OR OBJECT	GEODETIC AZIMUTH (Fram solid)	(From muth)	CODE
SANTAFE	269 40 14.5 269 40 14.5	270 05 27 267 40 07	0203 0405
Position Gatermined by traverse from station SANTAFE.		armin lan	

NAME OF STATION: BORY PT NO 4 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

source: G-13386

GEODETIC LATITUTE:	34 42 59.7	4271 ELEVATION	METERS
GEODETIC LONGITUDE:	114 29 12.5	2097	FEET

STATE COORDINATES (Fm)				
STATE & ZONE	CODE	×	*	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. V	0203 0405	278,573.42 3,055,546.68	1,352,966.84 461,185.46	- 00 25 11 + 02 00 09

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH (From south)	CODE
al len the			
Position determined by traverse from station CENTER and checked by additional observations.		Lance and	

NAME OF STATION: ELPASO = BORY PT NO 5 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE G-13386

V

GEODETIC LATITUTE:	34 42 54.70265	ELEVATION:	METERS
GEODETIC LONGITUDE:	114 29 02.04375	7A34- NO NO ALL	PEET

STATE COORDINATES (Feet)				
STATE & ZONE CODE		STATE & ZONE CODE X	*	$\theta$ (OR $\Delta$ $\alpha$ ) ANGLE
ARIZ. W. CALIF. V	0203 0405	279,444.33 3,056,438.56	1,352,450.93 460,706.86	- 00 25 05 + 02 00 15

(From smuth)	(From south)	
	252 12 40 249 47 20	0203 0405
	251 47 34.9 251 47 34.9	251 47 34.9 252 12 40

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BORY PT NO 6 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE G-13386

FIELD SKETCH: ARTZ 52-1

NO CHECK ON THIS POSITION

GEODETIC LATITUTE: 34 17 47-92195 GEODETIC LONGITUDE: 114 08 18.43732 ELEVATION: METERS FEET

STATE COORDINATES (Fee)						
STATE & ZONE	CODE	×	Ψ,	θ (OR Δ α) ANGLE		
ARIZ. W. CALIF. V	0203 0405	382,675.39 3,166,031.79	1,199,554.50 312,312.11	- 00 13 08 + 02 12 04		

TO STATION OR OBJECT	(From south)	(From south)	CODE
Position determined by traverse from station PARKER DAM.			N I

NAME OF STATION: BORY PT NO 7 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE G-13386

FIELD SKETCH:

GEODETIC LATITUTE:	34 10 13.41020	ELEVATION:	METERS
GEODETIC LONGITUDE	114 16 05.32480		FEET

STATE COORDINATES (Feet)					
STATE & ZONE	CODE	×	· Y	θ (OR Δ Ø) ANGLE	
ARIZ W. CALIF V	0203 0405	343,270.87 3,128,594.00	1,153,785.24 264,920.00	- 0 17 28 + 2 07 38	

TO STATION OR DBJECT	GEODETIC AZIMUTH (From 1941h)	PLANE AZIMUTH (From 19416)	CODE
This station was determined by photogrammetric methods and is referenced from triang- lation station DOCK (*Ariz. 52-I).	• •	•	100

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### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WATHEN = BORY PT NO B ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

GEODETIC LATITUTE:	34 10 20-19675	ELEVATION	METERS
GEODETIC LONGITUDE:			FEET

STATE COORDINATES (Fert)					
STATE & ZONE	CODE	×	Ÿ	$\theta$ (or $\Delta$ $\alpha$ ) Angle	
ARIZ. W. CALIF. V	0203 0405	341,335.53 3,126,631.00	1,154,481.15 265,533.64	- 00 17 41 + 02 07 25	

TO STATION OR OBJECT	GEODETIC AZIMUTH	PLANE AZIMUTH (From (outh)	CODE
BLUFF BLUFF	269 31 40.0 269 31 40.0	269 49 21 267 24 15	0203 0405
	10-17 10	annes es	

 $\nabla$ 

### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BDRY PT NO 9 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND ORDER

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE: 0-13386

FIELD SKETCH: \*

GEODETIC LATITUTE:	34 10 14.87530	ELEVATIONS	METERS
GEODETIC LONGITUDE:	114 17 10.57050		FEET

STATE COORDINATES (Fee)					
STATE & ZONE	CODE	- X-	· <b>Y</b> :	B (OR A a) ANGLE	
ARIZ W. CALIF V	0203 0405	337,789.49 3,123,110.00	1,153,961.67 264,865.00	- 0° 18′ 04′ + 2 07 01	

TO STATION OR OBJECT	GEODETIC AZIMUTH	FLANE AZIMUTH (From south)	CODE
This station was determined by photogrammetric methods and is referenced from triang- ulation station FLAT (*Ariz. 52-I).		• * •	

 $\Delta$ 

#### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: HDRY PT NO 10 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND -ORDER

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: \*

GEODETIC LATITUTE!	34 10 00 00000	ELEVATIONS	METERS
GEODETIC LONGITUDE:	114 17 31.46000	and the same	FEET

		STATE COORDINATES (	,	
STATE & ZONE	CODE	(x)	Y	$\theta$ (OR $\Delta$ $\alpha$ ) ANGLE
ARIZ W. CALIF V	0203 0405	336,026.30 3,121,411.41	1,152,467.31 263,297.57	- 0°18′16′ + 2 06 49

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH (From louin)	CODE
This station was determined by photogrammetric methods and is referenced from triangulation station VIEW (SAriz. 52-I).			

NAME OF STATION: BORY PT NO 11 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND-GROER

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-1

NO CHECK ON THIS POSITION

GEODETIC LATITUTE: GEODETIC LONGITUDE: 114 17 53-11631

34 09 34.34031

ELEVATION

METERS FEET

		STATE COORDINATES (	Fat)	
STATE & ZONE	CODE	×	¥	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. V	0203 0405	334,192.65 3,119,688.40	1,149.883.27 260,638.44	- 00 18 28 + 02 06 37

		-	
	- 1		

NAME OF STATION: BORY PT NO 12 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND -ORDER

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-I

GEODETIC LATITUTE:	33 43 58-11276	ELEVATION	METERS
GEODETIC LONGITUDE	114 30 36-04447	TREATHER STREET	FEET

		STATE COORDINATES (Fe	er)	
STATE & ZONE	CODE	x	Y	8 (OR A a) ANGLE
ARIZ. W. CALIF. VI	0203 0406	268,929.84 2,529,009.94	995,010.66 574,251.40	- 00 25 19 + 00 57 22

TO STATION OR OBJECT	(Frim south)	(From south)	CODE
BDRY REF PT NO 12	35 59 32.2	36 24 51	0203
BDRY REF PT NO 12	35 59 32.2	35 02 10	0406

NAME OF STATION: BDRY PT NO 13 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -DRDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE G-13386

FIELD SKETCH: ARIZ 52-I

NO CHECK ON THIS POSITION

GEODETIC LATITUTE: 33 36 17-31038 GEODETIC LONGITUDE: 114 31 48-52488 ELEVATION: METERS

		STATE COORDINATES (Fe	()	
STATE & ZONE	CODE	×	4	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. VI	0203 0406	262,456.82 2,523,657.56	948,479.94 527,579.67	- 00 25 55 + 00 56 42

GEODETIC AZIMUTH (From doubl)	PLANE AZIMUTH (From south)	CODE
	GEODETIC AZIMUTH (From Jawib)	

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BORY PT NO 14 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-1

NO CHECK ON THIS POSITION

GEODETIC LATITUTE 33 24 46 54852 GEODETIC LONGITUDE: 114 39 24.79576

ELEVATION METERS FEET

		STATE COORDINATES (Fe	t)	
STATE & ZONE	CODE	×	Y	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. VI	0203 0406	223,254.41 2,486,137.29	878,975.36 457,157.28	- 00 29 58 + 00 52 32

TO STATION OR OBJECT	(From south)	PLANE AZIMUTH (From muth)	CODE
		• • •	
Position determined by traverse from station CIBOLA.		A Real Legal 45,	

V

NAME OF STATION: BORY PT NO 15 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: \*

GEODETIC LATITUTE:	32	54 22.35270	ELEVATION:	METERS
GEODETIC LATITUTE:	114	27 43.15340		PRET

STATE COORDINATES (Fed)							
STATE & ZONE	cops	*	Y	$\theta$ (or $\Delta$ $\alpha$ ) angle			
ARIZ W. CALIF VI	0203 0406	281,478.42 2,548,767.10	694,144.98 273,781.55	- 0 23 12 + 0 58 57			

TO STATION OR OBJECT	GEODETIC AZIMUTH	PLANE AZIMUTH (From south)	CODE
This station was determined by photogrammetric methods and is referenced from triangulation station SQUAW (GAriz. 52-II).			

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#### ADJUSTED HORIZONTAL CONTROL DATA

4

NAME OF STATION: BORY PT NO 16 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

GEODETIC LATITUTE!	32 52 58.82283	ELEVATION:	METERS
GEODETIC LONGITUDE:	114 27 50.24197	10 100	PEET

STATE COORDINATES (Fell)							
STATE & ZONE	CODE	×	¥	θ (OR Δ α) ANGLE			
ARIZ. W. CALIF. VI	0203 0406	280,816.94 2,548,307.43	685,707.23 265,330.45	- 00 23 16 + 00 58 53			

TO STATION OR OBJECT	GEODETIC AZIMUTH (From 1041b)	(From Math)	CODE
IMPERIAL IMPERIAL	275 12 42.2 275 12 42.2	275 35 58 274 13 49	0203 0406
	181-2-181	I HEROL MAIL	

V

NAME OF STATION: BORY PT NO 17 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

GEODETIC LATITUTE:	32 50 39.87937	ELEVATION:	METERS
GEODETIC LONGITUDE	114 28 06.22867		FEET

STATE COORDINATES (Fut)							
STATE & ZONE	CODE	×	Y	θ (OR Δ α) ANGLE			
ARIZ. W. CALIF. VI	0203 0406	279,358.06 2,547,184.20	571,674.42 251,266.81	- 00 23 23 + 00 58 45			

TO STATION OR OBJECT	(From mush)	(From south)	CODE
his boundary point was not arked in the 1964 C&GS survey. The position is at the intersection of the lines normal to the congitudinal axis of the Imperial and Laguna dams. (See description)			

NAME OF STATION: BORY PT NO 18 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND -ORDER

LOGALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-II

GEODETIC LATITUTES	32 49 24.14592	ELEVATIONS	METERS
GEODETIC LONGITUDE	114 29 36.00955		FEET

STATE COORDINATES (Fee)							
STATE & ZONE	CODE	x	Y	$\theta$ (or $\Delta$ $\alpha$ ) angle			
ARIZ. W. CALIF. VI	0203 0406	271,644.46 2,539,654.32	664,073.58 243,483.90	- 00 24 11 + 00 57 55			

	TO S	STATION	OR	TOSLEO	16	VOICE CONTRACTOR		AZIMUTH outh)	PLANE (Fr	M JONE		CODE
75 / Sept. 100 (100 ft 100 ft		1 2 12 2 2 4		LAGUNA LAGUNA		100 C N T LEDV	10/52/94/53	10.0	315 314		100 March 11	0203 0406
						misi						

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#### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: HDRY PT NO 19 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: \*

GEODETIC LATITUTE	32 48 58.07760	ELEVATION	METERS
GEODETIC LONGITUDE:	32 48 58.07760 114 30 36.22870		FEET

STATE COORDINATES (FM)				
STATE & ZONE	CODE	*	Y	8 (OR A a) ANGLE
ARIZ W. CALIF VI	0203 0406	266,486.64 2,534,560.00	661,475.58 240,763.50	- 0 24 43 + 0 57 22

TO STATION OR DEJECT	GEODETIC AZIMUTH (From Iculo)	(From Marin)	CODE
This station was determined by photogrammetric methods and is referenced from triangulation station KOOL (*Ariz. 52-II).			

NAME OF STATION: PDRY PT NO 20 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

V

FIELD SKETCH: \*

GEODETIC LATITUTE	32	45 25.78660	ELEVATION:	METERS
GEODETIC LONGITUDE:	114	31 33.33340		FEET

STATE COORDINATES (Feit)				
STATE & ZONE	CODE	×	- · · · ·	$\theta$ (OR $\Delta$ $\alpha$ ) ANGLE
ARIZ W. CALIF VI	0203 0406	261,455.78 2,530,041.79	640,056.34 219,230.23	- 0 25 12 + 0 56 51

TO STATION OR DELECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH (From south)	CODE
This station was determined by photogrammetric methods and is referenced from triangulation station T8S R22W WS4 PS9 (* Ariz. 52-II).			

 $\nabla$ 

#### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BORY PT NO 21 BLM ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNCARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-11

GEODETIC LATITUTE:	32 45 25-34781	ELEVATION:	METERS
GEODETIC LONGITUDE	114 32 17-55283		FEET

STATE COORDINATES (FM)				
STATE & ZONE	CODE	×	¥	$\theta$ (or $\Delta$ $\alpha$ ) angle
ARIZ. W. CALIF. VI	0203 0406	257,679.12 2,526,266.58	640,039.89 219,123.67	- 00 25 35 + 00 56 26

TO STATION OR OBJECT	GEODETIC AZIMUTH (From jouth)	(From state)	CODE
BDRY PT NO 22 BLM ARIZ-CALIF	0 00 45.0	0 26 20	0203
BDRY PT NO 22 BLM ARIZ-CALIF	0 00 45.0	359 04 19	0406

NAME OF STATION BORY PT NO 22 BLM ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-11

GEODETIC LATITUTE:	32	44	59.36240	ELEVATION:	METERS
GEODETIC LONGITUDE:					FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	×	Y	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. VI	0203 0406	257,658.99 2,526,309.12	637,413.75 216,497.79	- 00 25 35 + 00 56 26

TOSLEO NO NOITATE OT	(Fee such)	PLANE AZIMUTH (From south)	CODE
BORY PT NO 21 BLM ARIZ-CALIF	180 00 45.0	180 26 20	0203
BORY PT NO 21 BLM ARIZ-CALIF	180 00 45.0	179 04 19	0406

#### ADJUSTED HORIZONTAL CONTROL DATA

SECOND -ORDER

NAME OF STATION: BORY PT NO 23 GLO ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-11

GEODETIC LATITUTE: 32 44 58.63083 ELEVATION: METERS GEODETIC LONGITUDE: 114 33 49.33745

STATE COORDINATES (Fee)				
STATE & ZONE	CODE	.*	· v	$\theta$ (or $\Delta$ $\alpha$ ) angle
ARIZ. W. CALIF. VI	0203 0406	249,819.94 2,518,472.62	637,399.10 216,296.13	- 00 26 25 + 00 55 36

TO STATION OR OBJECT	(From south)	PLANE AZIMUTH (From 10016)	CODE
POLE	0 29 08.0	0 55 33	0203
	0 29 08.0	359 33 32	0406

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BORY PT NO 24 GLO ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND-DRDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-11

NO CHECK ON THIS POSTTION

GEODETIC LATITUTE: 32 44 32.51389 GEODETIC LONGITUDE: 114 33 49.32668 ELEVATION: METERS FEET

	1	700		12 1
STATE & ZONE	CODE	X	, W.	8 (OR A a) ANGLE
ARIZ. W. CALIF. VI	0203 0406	249,800.58 2,518,516.23	634,759,66	- 00 26 24 + 00 55 36

TO STATION OR OBJECT	GEODETIC AZIMUTH (From wath)	PLANE AZIMUTH	CODE
Position determined by traverse from station POLE.			

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#### ADJUSTED HORIZONTAL CONTROL DATA

V

NAME OF STATION: BORY PT NO 25 GLO ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY ARIZONA-CALIFORNIA BOUNDARY

SOURCE: 6-13385

FIELD SKETCH: ARIZ 52-11

NO CHECK ON THIS POSITION

GEODETIC LATITUTE: 32 44 32.49666 GEODETIC LONGITUDE: 114 34 51.19491

ELEVATION: METERS FEET

		STATE COORDINATES (FA	u)	
STATE & ZONE	CODE	. x	347	$\theta$ (or $\Delta$ $\alpha$ ) angle
ARIZ. W. CALIF. VI	0203 0406	244,516.13 2,513,232.34	634,798.94 213,570.21	- 00 26 58 + 00 55 02

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH (From 10416)	CODE
m Hilm Com	* 7 *	•	
Position determined by traverse from station COB.			

#### $\nabla$

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BDRY PT NO 26 BLM ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-11

GEODETIC LATITUTE:	32 44 06.37650	ELEVATION	METERS
GEODETIC LONGITUDE:	114 34 51.17812	Sale 1 1 A 811	FEET

STATE COORDINATES (Fm)					
STATE & ZONE	CODE	x	*	θ (OR Δ α) ANGLE	
ARIZ. W. CALIF. VI	0203 0406	244,496.86 2,513,276.04	632,159.17 210,930.72	- 00 26 58 + 00 55 02	

TO STATION OR OBJECT	(From Hail)	(Fre 19416)	CODE
COB	179 58 40.4	180 25 38	0203
COB	179 58 40.4	179 03 38	0406

NAME OF STATION: BORY PT NO 27 BLM ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386 FIELD SKETCH: ARIZ 52-II

GEODETIC LATITUTE:	32 44 04-09639	ELEVATION:	METERS
GEODETIC LONGITUDE:	114 36 51-47272	Participated by the second	FEET

STATE COORDINATES (Fett)					
STATE & ZONE	CODE	RX:	.Y	$\theta$ (OR $\Delta$ $\alpha$ ) ANGLE	
ARIZ. W. CALIF. VI	0203 0406	234,219.23 2,503,004.89	632,010.94 210,537.46	- 00 28 03 + 00 53 56	

TO STATION OR OBJECT	GEODETIC AZIMUTH (From 10410)	(From south)	CODE
BORY PT NO 26 BLM ARIZ-CALIF	268 42 22-8	269 10 26	0203
BORY PT NO 26 BLM ARIZ-CALIF	268 42 22-8	267 48 27	0406

#### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BORY PT NO 28 BLM ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964 SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

FIELD SKETCH: ARIZ 52-11

32 43 57-11177 ELEVATION: GEODETIC LATITUTE: METERS GEODETIC LONGITUDE: 114 36 50.73949 FEET

STATE COORDINATES (Feet)					
STATE & ZONE	CODE	*	Y	$\theta$ (or $\Delta$ $\alpha$ ) angle	
ARIZ. W. CALIF. VI	0203 0406	234,276.11 2,503,078.59	631,304.55	- 00 28 02 + 00 53 56	

(Ferm south)	(From south)	CODE
	215 05 55 213 43 57	0203
	14 37 53.4 14 37 53.4	14 37 53.4 215 05 55

 $\nabla$ 

# ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BORY PT NO 29 BLM ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

GEODETIC LATITUTE:	32 43 57-11158	ELEVATION:	METERS
GEODETIC LONGITUDE	114 36 51-06909		FEET

STATE COORDINATES (Fml)				
STATE & ZONE	CODE	×	Y	$\theta$ (or $\Delta$ $\alpha$ ) Angle
ARIZ. W. CALIF. VI	0203 0406	234,247.96 2,503,050,43	631,304.76 209,832,17	- 00 28 02 + 00 53 56

7	TOSTATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH (Fram south)	CODE
	D 26 BLM ARIZ-CALIF	264 46 01.8	265 14 04	0203
	D 26 BLM ARIZ-CALIF	264 46 01.8	263 52 06	0406

NAME OF STATION: BORY PT NO 30 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

GEODETIC LATITUTE:	32 43 47.74195	ELEVATION	METERS
GEODETIC LONGITUDE:	114 36 53-13628		FEET

STATE COORDINATES (Fet)				
STATE & ZONE	CODE	x	Ψ.	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. VI	0203 0406	234,063.64 2,502,888.71	630,359.28 208,882.58	- 00 28 03 + 00 53 55

TO STATIC	ON OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH (From south)	CODE
um 46.20	i izra			
		41,463-015	11424 185 114	
		1		
		•		

#### ADJUSTED HORIZONTAL CONTROL DATA

4

NAME OF STATION: BORY PT NO 31 BLM ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND-ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13385

GEODETIC LATITUTE:	32 43 47.74164	ELEVATION	METERS
GEODETIC LONGITUDE:	114 36 54.06545		FEET

STATE & ZONE	CODE	x	Y	θ (OR Δ α) ANGLE
ARIZ. W.	0203	233,984.26	630,359,90	- 00 28 04
CALIF. VI	0406	2,502,809.34	208,881,29	+ 00 53 54

TO STATION OR OBJECT	GEODETIC AZIMUTH (From togale)	PLANE AZIMUTH (From 10416)	CODE
BDRY PT NO 33 ARIZ-CALIF BDRY PT NO 33 ARIZ-CALIF	84 55 49.5 84 55 49.5	85 23 54 84 01 56	0203 0406
	100		

A

NAME OF STATION: BDRY PT NO 32 ARIZ-CALIF

STATE ARIZONIA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY ARIZONIA-CALIFORNIA BOUNDARY

SOURCE G-13385

V

FIELD SKETCH: #

			0.50 (2.08) (0.0)	
GEODETIC LATITUTE	32	#3 #3 #3660	ELEVATION	METERS
GEODETIC LATITUTE:	114	36 54.21480	STATES OF ST. DAY	PEET

		STATE COORDINATES (FM	0	
STATE & ZONE	CODE	×	Y	$\theta$ (OR $\Delta$ $\alpha$ ) ANGLE
ARIZ W. CALIF VI	0203 0406	233,967.12 2,502,805.00	629,823.86 208,345.00	- 0 28 04 + 0 53 54

TO STATION OR OBJECT	GEODETH	C AZIN	 PLANE (Frem	AZIMU (AWA)	TH	CODE
		*		-		
This station was determined by photogrammetric methods and is referenced from triangulation station MISSION (*Ariz. 52-II).						

NAME OF STATION: BORY PT NO 33 ARIZ-CALIF

STATE ARIZONA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONA-CALIFORNIA BOUNDARY

SOURCE: G-13386

V

GEODETIC LATITUTE	32 43 45.37941	ELEVATION	METERS
GEODETIC LONGITUDE:	114 37 25.55221		FEET

		STATE COORDINATES (FA	11)	
STATE & ZONE	CODE	×	4	θ (OR Δ α) ANGLE
ARIZ. W. CALIF. VI	0203 0406	231,292.48 2,500,123.51	630.143.24 208.600.51	- 00 28 21 + 00 53 37

TOSTATO NO NOITATE OT	GEODETIC AZIMUTH (From path)	PLANE AZIMUTH (From touth)	CODE
MISSION	271 34 15.0	272 02 36	0203
	271 34 15.0	270 40 38	0406

 $\nabla$ 

NAME OF STATION: EDRY PT NO 34 ARIZ-CALIF

STATE ARIZONIA-CALIFORNIA YEAR: 1964

SECOND -ORDER

LOCALITY: ARIZONIA-CALIFORNIA BOUNDARY

source: G-13386

FIELD SKETCH! \*

GEODETIC LATITUTE:	122		ELEVATION:	METERS
GEODETIC LATITUTE:	32	43 07.28790		FEET
	114	43 07.35030		1 722

		STATE COORDINATES (Fee	)	
STATE & ZONE	CODE	×	Y	θ (OR Δ α) ANGLE
ARIZ W. CALIF VI	0203 0406	202,058.22 2,470,983.68	626,547.44 204,309.08	- 0 31 25 + 0 50 29

TO STATION OR OBJECT	GEODETIC AZIMUTH (Fram mach)	PLANE AZIMUTH (From 104/b)	CODE	
This station was determined by photogrammetric methods and is referenced from triangulation stations T16S R21E S35 S22 and EOUNDARY MONUMENT NO 206 CALIF-MEXICO (*Ariz. 52-II).				

#### COLORADO RIVER BOUNDARY COMMISSION OF ARIZONA

# CERTIFICATION OF CONFORMITY OF SURVEY AND BOUNDARY DESCRIPTION

Whereas, the Interstate Compact executed between the States of Arizona and California, as set forth in Arizona Session Laws 1963. Chapter 77, fixes by reference to stations of latitude and longitude the location of the boundary line between Arizona and California on the Colorado River from the southern boundary of the State of Nevada to the point on the international boundary which is common to the boundaries of Arizona and California and the United Mexican States; and

Whereas, said Compact provides that said boundary shall be in accordance with a description in general terms of 34 points on the boundary and that said 34 points will be marked on the existing bridges and dams and where appropriate will be monumented, and that between each of these 34 points there will be a number of subpoints not monumented, and that the total number of points and subpoints will approximate 234; and

Whereas, said Compact does further provide that the United States Coast and Geodetic Survey will locate the above-mentioned 34 points on the boundary by precise geodetic surveys and will locate the remaining approximately 200 unmonumented subpoints by precise photogrammetric methods and will provide a list of the geographic positions and state coordinate positions (Transverse Mercator projection for Arizona and Lambert conformal conic projection for California) of each of the 234 points on the boundary; and does further provide that the approximately 200 unmonumented subpoints will be identified on copies of the aerial photographs to define the boundary; and that the said Coast and Geodetic Survey will then locate the points so identified by analytic aerotriangulation (photogrammetric methods);

Now, Therefore, the Colorado River Boundary Commission of Arizona hereby certifies that the survey and boundary description has been completed by the United States Coast and Geodetic Survey and contains 215 unmonumented subpoints which are identified on copies of the aerial photographs, and that the total number of points and subpoints are 249, and that it is in conformity with the general description of the boundary between Arizona and California set forth in Article II of the INTERSTATE COMPACT DEFINING THE BOUNDARY BETWEEN THE STATES OF ARIZONA AND CALIFORNIA; and, when said survey and boundary description has been similarly certified by the Colorado River Boundary Commission of California, it is ordered that this Certification be attached to the aforesaid survey and boundary description, which said survey and boundary description, which said survey and boundary description (with said Certifications attached thereto) shall thereupon be marked Exhibit "A" and affixed to the said INTERSTATE COMPACT DEFINING THE BOUNDARY BETWEEN THE STATES OF ARIZONA AND CALIFORNIA.

I certify that the foregoing is a full, true and correct copy of a Certification duly adopted by the Colorado River Boundary Commission of Arizona at its meeting held on November 23, 1965, at which a quorum was present and acting

's OBED M LASSEN

OBED M. LASSEN, Chairman, Colorado River Boundary Commission of Arizona

# CERTIFICATION OF CONFORMITY OF SURVEY AND BOUNDARY DESCRIPTION

Whereas, the Interstate Compact executed between the States of Arizona and California, as set forth in Chapter 3.5, Division 1, Title I. California Government Code, fixes by reference to stations of latitude and longitude the location of the boundary line between Arizona and California on the Colorado River from the southern boundary of the State of Nevada to the point on the international boundary which is common to the boundaries of Arizona and California and the United Mexican States; and

Whereas, said Compact provides that said boundary shall be in accordance with a description in general terms of 34 points on the boundary and that said 34 points will be marked on existing bridges and dams and, where appropriate will be monumented and that between each of these 34 points there will be a number of subpoints not monumented and that the total number of points and

subpoints will approximate 234; and

Whereas, said Compact does further provide that the United States Coast and Geodetic Survey will locate the above-mentioned 34 points on the boundary by precise geodetic surveys and will locate the remaining approximately 200 unmountmented subpoints by precise photogrammetric methods and will provide a list of the geographic positions and state coordinate positions (Transverse Mercator projection for Arizona and Lambert conformal come projection for California of each of the 234 points on the boundary; and does further provide that the approximately 200 unmonumented subpoints will be identified on copies of the aerial photographs to define the boundary; and that the said Coast and Geodetic Survey will then locate the points so identified by analytic aerotri-

angulation (photogrammetric methods)

NOW THEREFORE, the Colorado River Boundary Commission of California horoby vertifies that the survey and boundary description has been completed by the United States Coast and Geodetic Survey and contains 215 immonumented subpoints which are identified on copies of the aerial photographs, and that the total number of points and subpoints are 249, and that it is in conformity with the general description of the boundary between Arizona and California set forth in Article 2 of the INTERSTATE COMPACT DEFINING THE BOUNDARY BETWEEN THE STATES OF ARIZONA AND CALIFORNIA; and, when said survey and boundary description has been similarly certified by the Colorado River Boundary Commission of Arizona, it is ordered that this Certification be attached to the aforesaid survey and boundary description, which said survey and boundary description (with said Certifications attached thereto) shall thereupon be marked Exhibit "A" and affixed to the said INTERSTATE COMPACT DEFINING THE BOUNDARY BETWEEN THE STATES OF ARIZONA AND CALIFORNIA.

I certify that the foregoing is a full, true and correct copy of a Certification duly adopted by the Colorado River Boundary Commission of California at its meeting held on November 15, 1965, at which a quorum was present and acting.

s. F J HORTIG

F. J. Horric, Chairman, Colorado River Boundary Commission of California