CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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~~3S - 8E~~

T8S- R3E

7-8-9-17-18 all

Public Domain

LAW OFFICES
TWITTY, SIEVWRIGHT & MILLS
TITLE & TRUST BUILDING
PHOENIX 3, ARIZONA

HOWARD A. TWITTY
RALPH B. SIEVWRIGHT
JOHN F. MILLS

TELEPHONE
ALPINE 3-4195

June 11, 1962

Mr. E. N. Pennebaker
P. O. Box 817
Scottsdale, Arizona

Re: Sections 27 and 34, Township 5 South, Range 5 East

Dear Penney:

Surety Title and Trust Company has furnished us the following information today with respect to the ownership in the above numbered sections:

Section 27: all

W½NE¼: Record title is in William L. English but subject to a contract of sale to Tucson Title Insurance Company as Trustee under Trust No. 10224.

E½NE¼: Record title is in William L. English but subject to a contract of sale to Frieda Volk.

N½NW¼: Record title is in Arizona Land Title & Trust Co. under Trusts Nos. 5424 and 5861.

S½NW¼: Record title is in Joseph C. Charles but subject to a contract of sale to Sol Cohen and Sara Jane Cohen.

E½SE¼: Record title is in Lawyers Title of Phoenix.

W½SE¼: Record title is in John Paul Owen.

SW¼: Record title is in Edith S. Bruton.

Section 34:

N½: Record title is in Tucson Title Insurance Company under Trust No. 6020 but subject to

a contract of sale to Arizona Land Title & Trust Co. and option to American Smelting and Refining Company.

S½: Owned by the State of Arizona.

Best regards.

Sincerely yours,

TWITTY, SIEVWRIGHT & MILLS

By Howard A. Twitty

HAT:ec

Sec 5 1/4

?

LAW OFFICES
TWITTY, SIEVWRIGHT & MILLS
TITLE & TRUST BUILDING
PHOENIX 3, ARIZONA

HOWARD A. TWITTY
RALPH B. SIEVWRIGHT
JOHN F. MILLS

TELEPHONE
ALPINE 3-4195

May 25, 1962

Mr. E. N. Pennebaker
P. O. Box 817
Scottsdale, Arizona

Dear Penney:

The following information was telephoned me yesterday by the Surety Title & Trust Company:

Township 5 South, Range 5 East

Section 25: All of Section 25 has been optioned by the American Smelting & Refining Company from the record owners, who are as follows:

NE¼ is being purchased by Herbert F. Bloom from Arizona Land Title & Trust Company, Trustee under Trust 5131-T;

SE¼ is owned by Cyril M. Cron;

W½ is owned by Herbert F. Bloom.

Section 26: All of Section 26 has been optioned by the American Smelting & Refining Company from the record owner, Surety Title & Trust Company, under a Trust;

Section 35: The N½ and the SE¼ have been optioned by American Smelting & Refining Company from the record owners, or parties purchasing parcels under contract; the NE¼ is owned by Harry A. Rasch but is being purchased under contract by I. R. Fabricant; the NW¼ is owned by the Arizona Land Title & Trust Company, Trustee under Trust 5993-T; and the SE¼ is owned by J. Richard Heath.

None of the following parcels in Sections 30 and 31 have been optioned by American Smelting & Refining Company according to Pinal County records. These parcels and the record owners are as follows:

NE¼ of Section 30 is owned by Bernard Pulin and Julius Kauffman and wife;

Lot 2 and the E½NW¼ Section 30 are owned by William T. Spivey;

Lots 1, 3 and 4 and the E½SW¼ of Section 30 are owned by Thomas E. Barker;

SE¼ of Section 30 is owned by Sidney C. Yeomans.

In Section 31 all of the section, except the S½ of Lot 4, is owned by Thomas E. Barker, and the S½ of Lot 4 is owned by Johanna M. Freeman.

Sincerely yours,

TWITTY, SIEVWRIGHT & MILLS

By Howard A. Twitty

HAT:cl

LAW OFFICES
GUYNN, TWITTY & SIEVWRIGHT
TITLE & TRUST BUILDING
PHOENIX 3, ARIZONA

C. LEO GUYNN (1897-1958)
HOWARD A. TWITTY
RALPH B. SIEVWRIGHT
JOHN F. MILLS

TELEPHONE
ALPINE 3-4195

June 20, 1962

Mr. E. N. Pennebaker
Box 817
Scottsdale, Arizona

Dear Penny:

The enclosed list of properties and ownership thereof was received by us today from Surety Title and Trust Company.

Their statement for this work and past work was $40.00 which we are paying.

Sincerely yours,

TWITTY, SIEVWRIGHT & MILLS

By Howard A. Twitty

HAT:g
Encl.

TOWNSHIP SIX (6) SOUTH, RANGE FIVE (5) EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN

SECTION	SUBDIVISION	OWNER & ADDRESS
3	Lots 1, 2, 3, and 4	George T. Walker % 1200 State Street Perth Amboy, New Jersey
3	$S\frac{1}{2}N\frac{1}{2}$	Clarence D. Walker (same as above)
3	$SE\frac{1}{4}$	Phoenix Title & Trust Company (Trust No. RH 26-519, agreement held by Surety Title & Trust Company) P. O. Box 2832 Tucson, Arizona
3	$SW\frac{1}{4}$	N. R. Irby P. O. Box 254 Moriarty, New Mexico
4	$N\frac{1}{2}NE\frac{1}{4}$ (aka Lots 1 & 2)	Harry B. Rasch (Helen M.) 3318 E. Edgemont Tucson, Arizona
4	$S\frac{1}{2}NE\frac{1}{4}$	Phoenix Title & Trust Company (Trust No. RH 26-528) Tucson, Arizona
4	Lots 3 and 4; and $S\frac{1}{2}NW\frac{1}{4}$	Lou Parks 412 West Second Street Casa Grande, Arizona
4	$SE\frac{1}{4}$	Arizona Land Title & Trust Company (Trust No. 5263-T agreement held by Surety Title & Trust Co, Trust No. 1028) P. O. Box 5175 Tucson, Arizona
4.	$E\frac{1}{2}SW\frac{1}{4}$	Arizona Land Title & Trust Co. (Trust No. 5289-T - Agreement held by Trust No. 5528-T)
4	$W\frac{1}{2}SW\frac{1}{4}$	Arizona Land Title & Trust Co. (Trust No. 5289-T - Agreement held by Trust No. 5495-T)
5	Part $NE\frac{1}{4}$ and $NE\frac{1}{4}SE\frac{1}{4}$, N or R/R	Maud M. Abernathy 613 San Luis Rey Oceanside, California
5.	Pt $NE\frac{1}{4}$ & $NE\frac{1}{4}SE\frac{1}{4}$ S of R/R; $S\frac{1}{2}SE\frac{1}{4}$ and $NW\frac{1}{4}SE\frac{1}{4}$	John Albert Matthewman (Frieda J.) 944 Prospect Street Honolulu 14, Hawaii
5	$NW\frac{1}{4}$	Rosine Ludy 128 E. 87th Place Los Angeles 3, California
5	$E\frac{1}{2}SW\frac{1}{4}$	R. W. Ackert 11720 E. 215th Street Artesia, California

TOWNSHIP SIX (6) SOUTH, RANGE FIVE (5) EAST (Continued)

5	W½SW¼	Irving R. Blumenthal (Sylvia A.) Agreement held to Sam Siverton (Estelle) 1709 No. Fuller Avenue Los Angeles California
6	E½SW¼ and W½SE¼	Agnes V. Allen 10607 Oakmont Drive Sun City, Arizona
6	Lots 6 and 7	Marathon Investment Co. 333 W. Indian School Raod Phoenix, Arizona
6	E½SE¼	Lillian Friedland, wife of David, s/s Ethel Mansback, wife of Jacob, s/s Undiv 1/2 int each %Arizona Land Title & Trust Co. Tucson, Arizona
6	Lots 1, 2, 3, 4, and 5; S½NE¼ and SE¼NW¼	Maurice Perkins, single P. O. Box 1941 Tucson, Arizona

TOWNSHIP FIVE (5) SOUTH, RANGE FIVE (5) EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN

Also need Sec 27 data

SECTION	SUBDIVISION	OWNER & ADDRESS
28	NE¼	Ann Kocsis, single 1601 E. Blacklidge Tucson, Arizona
28	E½NW¼	Arizona Land Title & Trust Co. (Trust No. 5772-T) P. O. Box 5175 Tucson, Arizona
28	W½NW¼	John F. Swartz (Belle S.) Subject to contract to Alice Fenton, et als Swartz, 821 W. Weldon Avenue Phoenix, Arizona
28	W½SE¼ ✓	Phoenix Title & Trust Company (Trust RH 26,830- - Agreement to Mildred K. Wiener) 3350 E. Silverlake Road Tucson, Arizona
28	E½SE¼ ✓	Phoenix Title & Trust Company as Trustee, Agreement held by Sol Cohen (Sarah) P. O. Box 2832 Tucson, Arizona
28	SW¼ ✓	Adeline M. Miller, a widow & Alfred M. Kirschke, widower 135 S. Longfellow Tucson, Arizona
29	NE¼NE¼	W. T. Cantrell 1813 NW 34th Street Oklahoma City, Oklahoma
29	NW¼NE¼	Wm. S. Manley 610 Wenonah Avenue Oak Park, Illinois

TOWNSHIP FIVE (5) SOUTH, RANGE FIVE (5) EAST: (Continued)

29	$S\frac{1}{2}NE\frac{1}{4}$	Adeline M. Miller & Heln M. Marat (Victor) 135 South Longfellow Tucson, Arizona
29	$NE\frac{1}{4}NW\frac{1}{4}$	John A. O'Neil, Richard O'Neil, Mrs. O. N. Flina; Mrs. M. J. Ryan 901-A Sanchez Street San Francisco, California
29	$SE\frac{1}{4}NW\frac{1}{4}$ & $S\frac{1}{2}SW\frac{1}{4}NW\frac{1}{4}$	Surety Title & Trust Company, Trustee Agreement held by Arizona Land Title & Trust (No. 5785-T)
29	$NW\frac{1}{4}NW\frac{1}{4}$ & $N\frac{1}{2}SW\frac{1}{4}NW\frac{1}{4}$	Phoenix Title & Trust Company (Trust No. RH 26633) Tucson, Arizona
29.	$SW\frac{1}{4}$	United States of America
29	$N\frac{1}{2}SE\frac{1}{4}$ & $N\frac{1}{2}N\frac{1}{2}S\frac{1}{2}SE\frac{1}{4}$	Dan L. Mahoney (Minerva A.) 1131 N. Country Club Drive Tucson, Arizona
29	$S\frac{1}{2}N\frac{1}{2}S\frac{1}{2}SE\frac{1}{4}$ & $S\frac{1}{2}SE\frac{1}{4}SE\frac{1}{4}$ $N\frac{1}{2}S\frac{1}{2}S\frac{1}{2}SE\frac{1}{4}$	Russel H. Thomas (Adrienne) 1610 Avenida Reyulos Tucson, Arizona Subject to Agreement to Don E. Morgan, et als; 5536 10th Avenue South Minneapolis, Minnesota
29	W 30 acres of S 60 acres of $SE\frac{1}{4}$; ~~& E 10 acres of S 30 acres of $SW\frac{1}{4}SE\frac{1}{4}$~~	Charles J. McCourty (Grace) 11203 Milano Norwalk, California
29	E 10 acres of S 30 acres of $SW\frac{1}{4}SE\frac{1}{4}$	Vern E. Priser 3818 E. 2nd Street Tucson, Arizona
32	$S\frac{1}{2}$	Thomas E. Barker (Edith May) Route 1, Box 113 Tolleson, Arizona
32	$NW\frac{1}{4}$	State of Arizona
32	$NE\frac{1}{4}$	T. J. Cort (Ada) and Robert L. Cooke (Doris B.) subject to Agreement to Arizona Land Title & Trust Co. Trust No. 5665-T 5983 E. Edison Place Tucson, Arizona
33	$N\frac{1}{2}$	Edison I. Sarff (Leon) Subject to Agreement to Phoenix Title & Trust Company Truste 26766- Tucson, Arizona
33	$S\frac{1}{2}$	SUBDIVIDED as Gibson-Collard Subdivision

TOWNSHIP FIVE (5) SOUTH, RANGESIX (6) EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN

SECTION	SUBDIVISION	OWNER & ADDRESS
8	All	Indian Reservation
9	All	Indian Reservation
17	W½	Federal lands
17	NE¼	SUBDIVIDED as Askins Estates
17	SE¼	William S. Clark 1327 E. Moreland Phoenix, Arizona
18	S½ & NW¼	Federal lands
18	NE¼, less pts sold	Surety Title & Trust Company, Trustee, P. O. Box 609 Florence, Arizona
19	SE¼	Murler Stewart Wallis % Black 5731 W.Rowe Glendale, Arizona
19	SW¼	SUBDIVIDED as Desert Vista No. 5
19	NW¼	SUBDIVIDED as Desert Vista No. 6
19	NE¼	Surety Title & Trust Co., as Trustee
30	S½	Phoenix Title & Trust Company, Trustee
30	N½	Derald R. Fulton (Daisy B.) 4837 E. Helen Tucson, Arizona Subject to Agreement held by Vimer Enterprises, Inc.
31	N½ (NE¼; E½NW¼ & Lots 1 and2)	Salvatore Megna, Estate of, deceased (Glendora C.) % Phoenix Title & Trust Co., Executor of Estate P. O. Box 2832, Tucson, Arizona
31	S½SE¼	Surety Title & Trust Co., Trustee, Agreement held by trust No. 1028 P. O. Box 1792, Casa Grande, Arizona
31	S½SW¼	Surety Title & Trust Co., Trustee Casa Grande, Arizona
31	W½NE¼SE¼	Arthur Tonan (Subject to Agreement held by Phoenix Title & Trust Co. Trust 26875) 13025 Ramsey Drive La Mauda, California Phoenix Title - Tucson, Arizona
31	E½NE¼SE¼	Henry Siegel (Mary B.) 3628 E. Medlock Drive Phoenix, Arizona
31	NW¼SE¼	Antoinette Elena Tonan Guimm 4046 W. 16h Street Lawndale, California

TOWNSHIP FIVE (5) SOUTH, RANGE SIX (6) EAST (Continued)

31	$NE\frac{1}{4}SW\frac{1}{4}$	Arcadio Carl Tonan 13748 Busby Drive Whittier, California
31	$NW\frac{1}{4}SW\frac{1}{4}$ (Lot 3)	Anita Tonan Hughes Mission Blvd Riverside, California

NOTE: WE DO NOT FIND OPTIONS TO AMERICAN SMELTING AND REFINING COMPANY ON ANY OF THE LANDS DESCRIBED HEREIN

Mrs
Cohen

6604 E. Scarlett
Tucson

##

Apparently will
come down in
price

Jerome H. Courtney
President

Office Phone: MA 2-7633

Jerry Courtney Investment Co.

714 Arizona Land Title Bldg.
TUCSON, ARIZONA

August 2, 1962

Mr. Howard A. Twitty
Twitty, Slewwright & Mills
Title and Trust Building
Phoenix 3, Arizona

Re: N½NW¼ of Section 27, T5S, R5E.
Trusts 5686-T and 5861-T

Dear Mr. Twitty:

Our clients, the beneficiaries of the above trusts, will consider a sale of the subject property at an average price of $837.50 per acre. The proposed terms of such a sale would be 29% down and the balance payable over five years in annual or semi-annual installments, with interest at 6% per annum.

Our clients are not inclined to option their property but are willing to give consideration to any proposal you may have along that line.

Very truly yours,
COURTNEY INVESTMENT COMPANY

Irving Bartz, Vice-President

IB:rk

LAW OFFICES
GILBERT & GILBERT
1633 WESTWOOD BOULEVARD
LOS ANGELES 24, CALIFORNIA

LEON P. GILBERT
SANFORD D. GILBERT

BRADSHAW 2-6781
GRANITE 3-6557

July 24, 1962

Twitty, Sievwright & Mills
Title & Trust Bldg.
Phoenix 3, Arizona

ATTN: Howard Twitty

RE: E½NE¼ of Section 27, Township 5 South, Range 5 East, Pinal County, Arizona

Dear Mr. Twitty:

This is to acknowledge receipt of your letter of July 16, 1962 to Mrs. Helen Zuckerman in regard to the above mentioned property in Pinal County, Arizona.

This office represents Frieda Volk, Helen Zuckerman and the estate of Dr. Max R. Rubinstein, the owners of the property in question. If you are interested in the purchase of this property, it would be advisable if you would forward to this office a proposed offer in regard to said purchase. If the parties are interested in selling this property, they would be more amenable to a straight contract of purchase without options. However, if your client desires to enter into an option agreement, please forward to us his proposal.

Very truly yours,

GILBERT & GILBERT

Leon P. Gilbert

LPG:lsb

Mr. Sol Cohen
6604 East Scarlett
Tucson, Arizona
July 23, 1962

Twitty, Sievwright & Mills
Tile & Trust Building
Phoenix 3, Arizona

S½NW¼ of Section 27, Township
5 South, Range 5 East, Pinal
County, Arizona

Dear Sirs;

Concerning the above property which you wrote about: We are willing to sell said land if the terms are met. We ask $600 per acre; 29% of this as a down payment and the rest in five years.

For any further information, kindly write to the below address until October 1, 1962. We are on vacation and plan to return at that time.

Truly yours,
Mr. Sol Cohen
38 Linwood Avenue
Colchester, Conn.
Sol Cohen

J. A. MERQUELIN, PRESIDENT
P. H. VIVIAN, EXEC. V. P. & TREAS.

VIMER ENTERPRISES, INC.

P. O. Box 1295
STUART, FLORIDA

August 23, 1962

TWITTY, SIEVWRIGHT & MILLS,
Phoenix 3, Arizona

Attention: Mr. Howard A. Twitty

Re: Northwest 1/4 of Section 30,
Township 5 S Range 6 E, Pinal
County, Arizona

Dear Mr. Twitty:

This will acknowledge receipt of your letter of July 16, 1962 and express our regret at the delay in replying. This delay was caused by all the Officers of Vimer being out-of-town on vacation or on business.

Mr. J. A. Merquelin, President of Vimer Enterprises is now in California on business and plans to stop in Casa Grande on his return to Florida. I anticipate that he will be in Casa Grande on or about September 6 and I am forwarding your letter to him and requesting that he get in touch with you at that time.

Very truly yours,

Executive Vice President

PHV:ADD

HOWARD A. TWITTY

ATTORNEY AT LAW

GUYNN, TWITTY & SIEVWRIGHT

414 TITLE AND TRUST BUILDING

PHOENIX 3, ARIZONA

ALPINE 3-4195

6604 E Scarlett
Tucson, Arizona
Oct 16, 1962

S½ NW¼ of Section 27,
Township 5 South
range 5 East, Pinal
County, Arizona

Dear Sir,

We are leaving Tucson in
about one month and we are
interested in selling above
parcel of land. If you Client
is interested we will sell
it for $10 an acre. Before we leave,

Very Truly Yours,
Mr Sol Cohen.

BLM + State - Land Status Maps

Township. 6S ✓ : 7S ✓
R- 3E ✓ 3E ✓ } Ownership Data

Surety + Title to work on

5E ✓ - 6S ✓ Sec 3 - 4 - 5 + 6 ✓

✓ 5E - 5S Sec ~~29~~ 28 - 27 - ~~34~~ ~~35~~ - 33 ✓

6E - 5S { Sec 30 - 31 ✓
~~32~~ - 8 - 9 ✓
17 - 18 - 19 ✓

Five year option
$1.00 per acre per yr ann payment
Price 2x ag. farm rate for
① mineral rights only Plus
If a further option for
needed ② surface ground
Thus a double option -
Cost for surface option to be determined

RC-H - Will Return 6/8/16 ✓
Robt Steele Office - Grants, N.M.
287-2001

12 mo
1000 per mo.
Drill hole
Full info.
Lease with
tough royalty

E½ S¼
Sec. 27
5 & 5
80 acres

or
$12,000 initially, Full payment after 12 months
Lease arrangement

Geo. F. Walker
1200 State St.
Perth Amboy, N. J.
Sec - 3 - 5 & 5 & 65
Walnut Creek, Calif
101 Hillcrest Way
Another prop.
Ok.

Sats
1-23-64

N
S

W 1/2 SE 1/4 Sec - 27 - 5 & 5

(1) Dr. Paul Owens - Phx - 240 Osborn
CR 9-0661

---

(2) E 1/2 SE 1/4 Sec - 27 - 5 & 5

Don't know owners name
Milo H Klein (agent)
SW Trust Devel. Corp.
20 W Main, Scottsdale
→ Not the owner
Owner is fishing Minnesota -

N 1/2 NW 1/4 Sec. 27 - 5 & 5

(3)

Owner has 2 tracts - May have
some other nearby lands.
Irving Bartz VP of Jerry
Courtney Invest Co
714 Arizona Land Title
Bldg - Tucson

✓ Will talk to ~~Hs~~ us.

Sec. 3

Lots 1-2-3-4 5 & 6 S

(4) George F Walker

Tax to 320 Market St. Walnut Creek

|| Wants to be advised

≠ N½ of N½

---

(5) S½ of N½ Sec 3 - 5 - 6S

Clarence D. Walker

Tax statements to Beaverton, Ore

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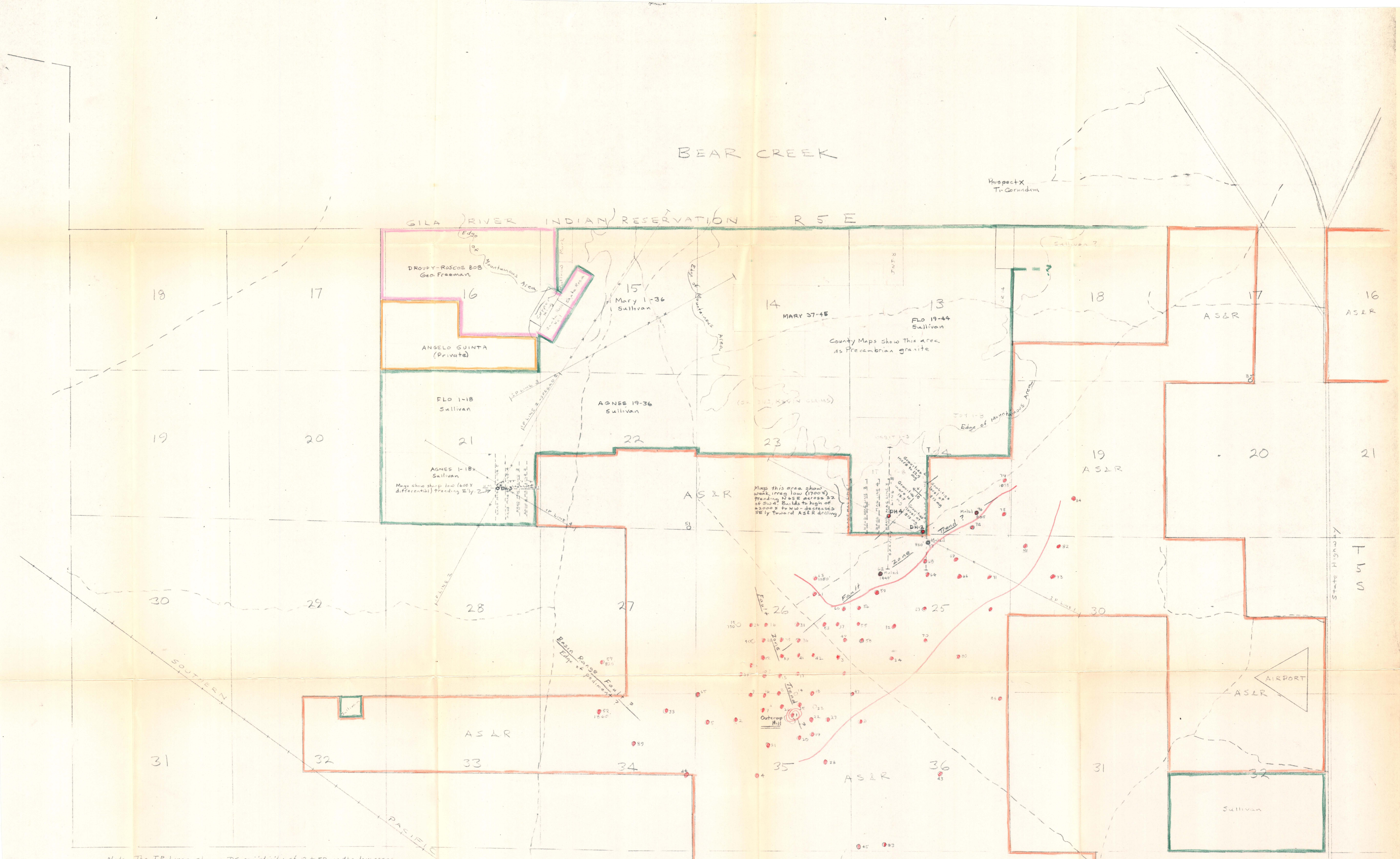
(6) W½ NE¼ Sec 27 - 5 - 5 -

Tucson Title Ins. Co. -

Owner will consider $ 50 acres @ 425 per acre on terms to be negotiated



Note. The IP Lines show a DC resistivity of 12 to 50 in the low areas (alluvium), increasing to 100-300 in mountainous areas (granite). PFE's are invariably low, less than 10, indicating little or no anomalism.

Drill logs on Sullivan Ground

DH-1: Metler Bros. - Aug-Sept, 1963 Rock bit

0-364'	Cgl-breccia. Angular fragments granite, monzonite, schist. No evidence of Cu minerals or other mnlzn.

DH-3: Metler Bros. Nov. 1963 Rock bit to 225'.

0-225	Qal and weathered bedrock
225'-344'	Granodiorite, 35% mafics (incl. 10% magnetite). Brecciated, recemented with SiO_2 and calcite. Occas. fractures, hematite stained. No Cu or other mnlzn.

DH-4: Metler Bros. Nov. 1963 Rock bit to 675, with short core runs

0-675'	Qal, weathered bedrock, and fairly fresh granite. Bedrock surface near 375'. Cores show bio. granite. No Cu mnls, hematite clay zones, or breccia.

DH-2: Metler Bros. - Sept-Nov, 1963

0-50	Qal
50-630	Cgl, mostly angular granite fragments, some schist in ferruginous ground mass
630-815	Sand, clay, hematite stain. Oxid Cu mnls at 720-726.
815-1034	Altered bx, granite and monzonite. Bx is recemented, much hematite coloration. Rock decomposed, soft.
1034-1066	Harder, basic, chloritic rock, perhaps diorite. Strong oxide copper mnlzn, some sulfide casts.
1066-1086	Alt'd granite bx, softer, red. Mnlzn continues to 1076. Interval 1034-1076, 64', average 0.98% Cu.
1086-1146	Alt'd, fractured bx - no copper
1146-1176	Hard siliceous qtz porphyry, minor Cu shows 1146-1156, strong ox. Cu 1156-1166, weak to 1176. Interval 1146-1176, 30', ave 0.55% Cu. Flt ? zone 1166-1167.5
1176-1431	Red alt'd granite bx. Casts after dissem. sulfides. Rare specks ox. Cu, and minor Cu at 1368-1377, .38% Cu. Black flt gg 1391-1398.
1431-1455	Harder, slightly alt'd gm, vugs from former suls. Altn more limonitic, yellowish. Hole caving at bottom.

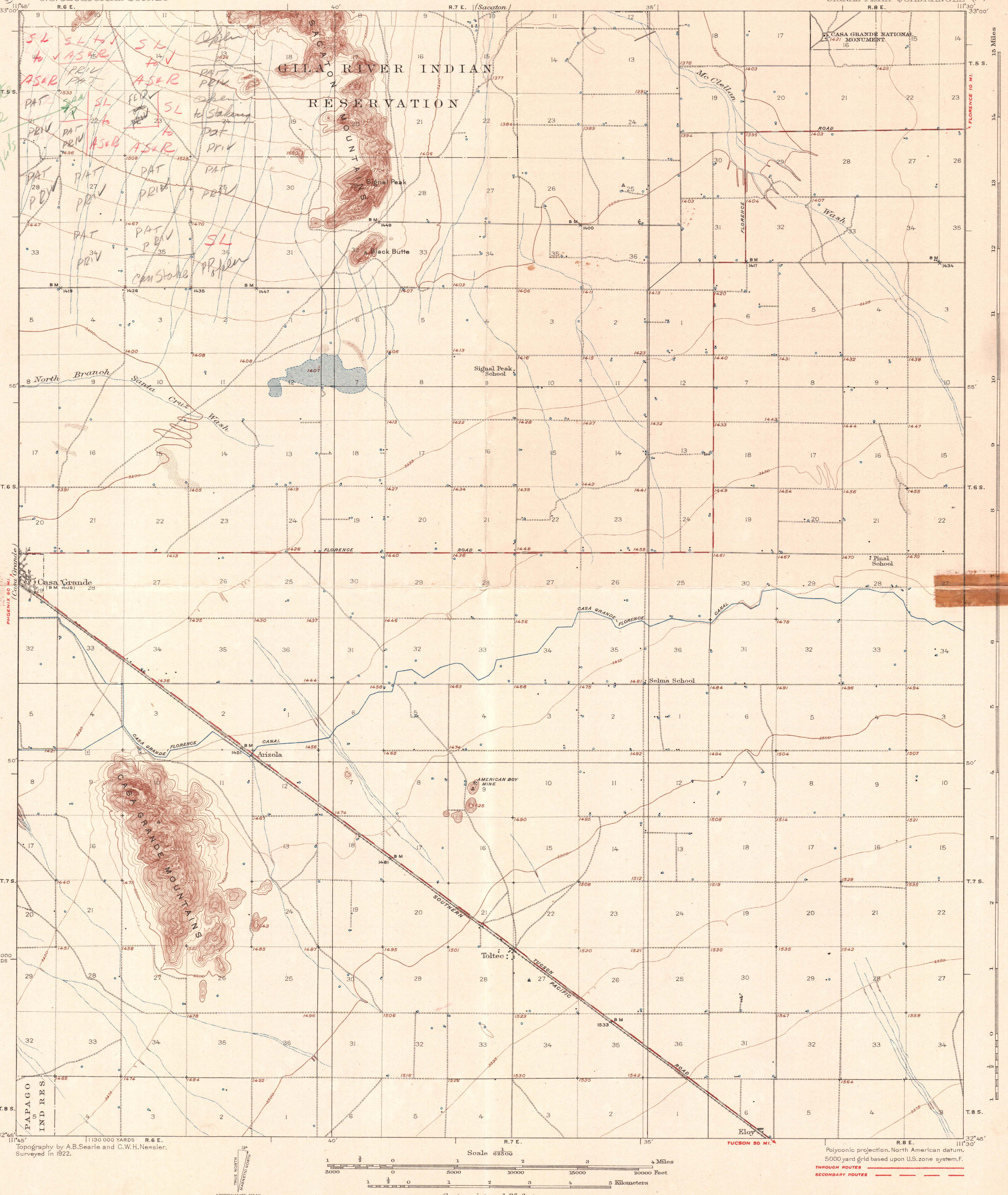
MAP AND DATA FROM FIELD DATA BY HEINRICHS GEOEXPLORATION, SACATON PROJECT, 1963, FOR MINERALS EXPLORATION COMPANY (LEASE FROM SULLIVAN ET AL)
CASA GRANDE AREA, PINAL CO, ARIZ.
SCALE: 1" = 1320'

TRACED: JDB 6-1-64

PINAL CO

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

ARIZONA
(PINAL COUNTY)
SIGNAL PEAK QUADRANGLE



Topography by A.B.Searle and C.W.H.Nessler.
Surveyed in 1922.

APPROXIMATE MEAN DECLINATION, 1922

Scale $\frac{1}{62500}$

Contour interval 25 feet.
Datum is mean sea level.

Polyconic projection. North American datum.
5000 yard grid based upon U.S. zone system, F.

THROUGH ROUTES
SECONDARY ROUTES

SIGNAL PEAK, ARIZ.
Edition of 1924.

THE TOPOGRAPHIC MAPS OF THE UNITED STATES

The United States Geological Survey is making a standard topographic atlas of the United States. This work has been in progress since 1882, and its results consist of published maps of more than 40 per cent of the country, exclusive of outlying possessions.

This topographic atlas is published in the form of maps on sheets measuring about 16½ by 20 inches. Under the general plan adopted the country is divided into quadrangles bounded by parallels of latitude and meridians of longitude. These quadrangles are mapped on different scales, the scale selected for each map being that which is best adapted to general use in the development of the country, and consequently, though the standard maps are of nearly uniform size, they represent areas of different sizes. On the lower margin of each map are printed graphic scales showing distances in feet, meters, and miles. In addition, the scale of the map is shown by a fraction expressing a fixed ratio between linear measurements on the map and corresponding distances on the ground. For example, the scale $\frac{1}{62,500}$ means that 1 unit on the map (such as 1 inch, 1 foot, or 1 meter) represents 62,500 similar units on the earth's surface.

Although some areas are surveyed and some maps are compiled and published on special scales for special purposes, the standard topographic surveys for the United States proper and the resulting maps have for many years been divided into three types, differentiated as follows:

1. Surveys of areas in which there are problems of great public importance—relating, for example, to mineral development, irrigation, or reclamation of swamp areas—are made with sufficient accuracy to be used in the publication of maps on a scale of $\frac{1}{31,680}$ (1 inch = one-half mile), with a contour interval of 1, 5, or 10 feet.

2. Surveys of areas in which there are problems of average public importance, such as most of the basin of the Mississippi and its tributaries, are made with sufficient accuracy to be used in the publication of maps on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile), with a contour interval of 10 to 25 feet.

3. Surveys of areas in which the problems are of minor public importance, such as much of the mountain or desert region of Arizona or New Mexico, are made with sufficient accuracy to be used in the publication of maps on a scale of $\frac{1}{125,000}$ (1 inch = nearly 2 miles), with a contour interval of 25 to 100 feet.

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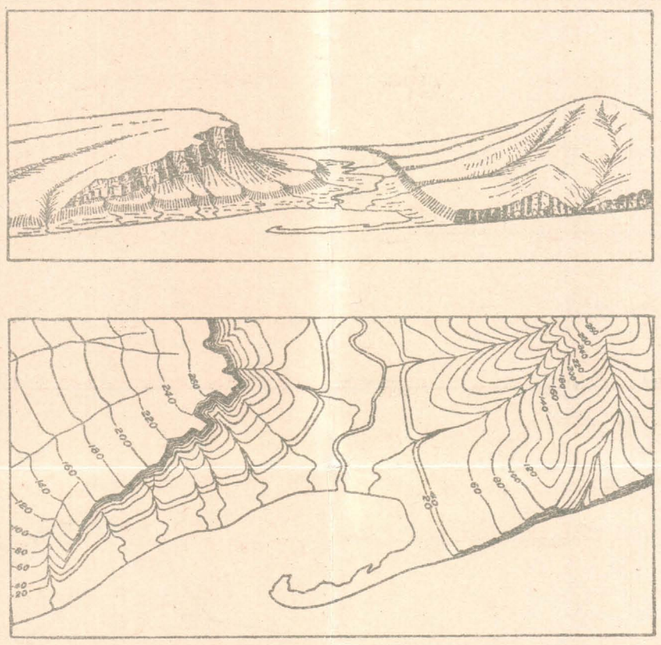

The sketch represents a river valley that lies between two hills. In the foreground is the sea, with a bay that is partly inclosed by a hooked sand bar. On each side of the valley is a terrace into which small streams have cut narrow gullies. The hill on the right has a rounded summit and gently sloping spurs separated by ravines. The spurs are truncated at their lower ends by a sea cliff. The hill at the left terminates abruptly at the valley in a steep scarp, from which it slopes gradually away and forms an inclined table-land that is traversed by a few shallow gullies. On the map each of these features is represented, directly beneath its position in the sketch, by contour lines.

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United States Geological Survey,
Washington, D. C.

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(printed in black)

City or village · Roads and buildings · Ruins · Cliff dwelling · Metaled road *(distinguished on recent maps only)* · Private or poor road · Trail or path · Railroads and stations · Electric railroad · Tunnel · Wharves · Breakwater and jetties · Bridges · Drawbridges · Ferry *(point upstream)* · Ford

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RELIEF
(printed in brown)

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(printed in blue)

Streams · Falls and rapids · Intermittent streams and ditches · Canals or ditches · Aqueducts or waterpipes · Aqueduct tunnels · Lake or pond · Unsurveyed stream and abandoned canal

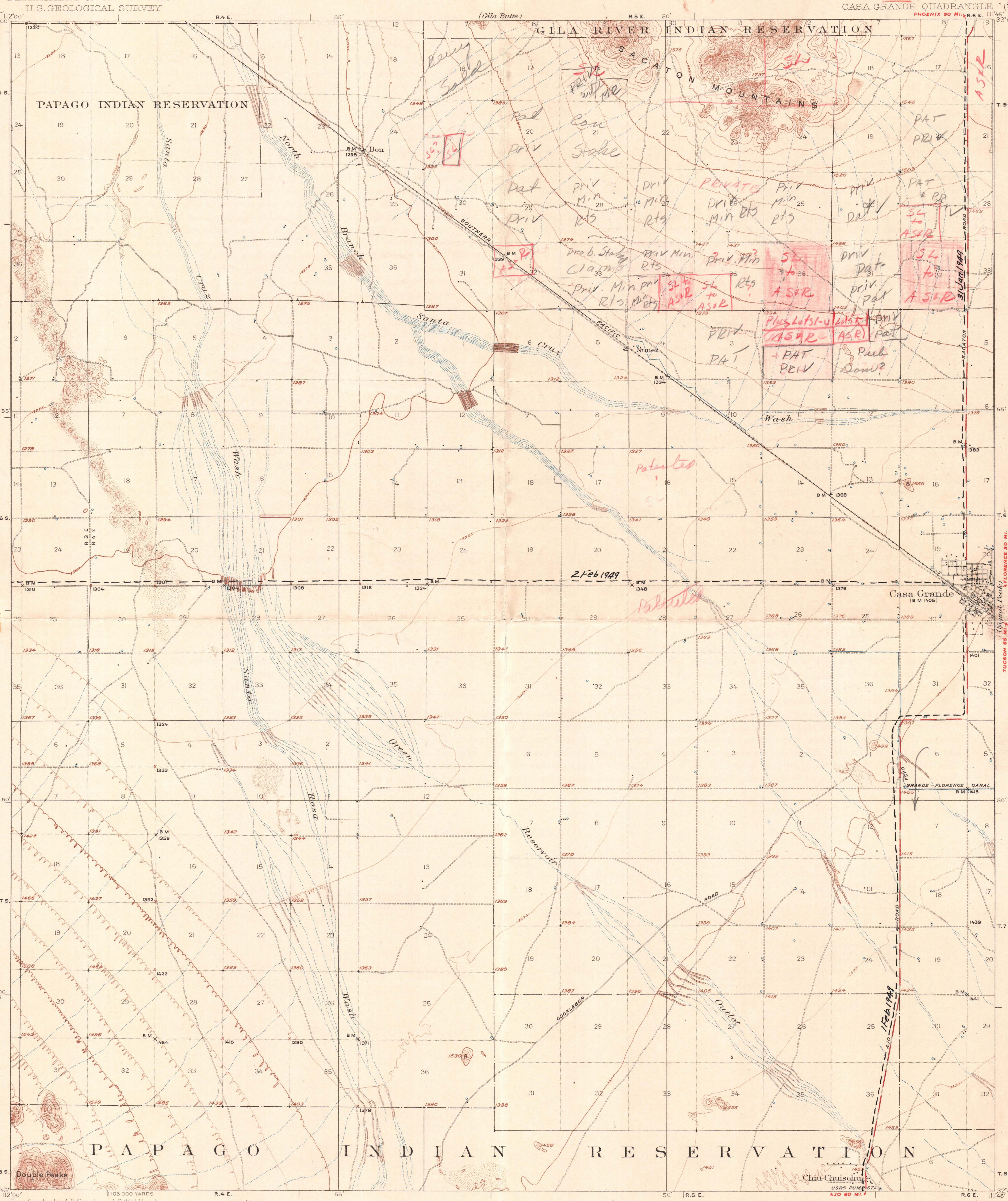
Intermittent lake · Glacier *(Or shown by contours printed in blue)* · Spring · Well · Salt marsh · Fresh marsh · Grassy pond · Tidal flats

WOODS
(when shown, printed in green)

AREAS SCOUTED FOR PERIOD 31JAN.-12FEB.1949
ROUTES: A. ABBOTT + G. PAPPAS: -------

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

ARIZONA
(PINAL COUNTY)
CASA GRANDE QUADRANGLE



Topography by A.B.Searle and C.W.H.Nessler
Surveyed in 1921-1922

TRUE NORTH
MAGNETIC NORTH
13°
APPROXIMATE MEAN DECLINATION, 1922

Scale $\frac{1}{62500}$

1 ½ 0 1 2 3 4 Miles
5000 0 5000 10000 15000 20000 Feet
1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 25 feet
Datum is mean sea level

Polyconic projection. North American datum
5000 yard grid based upon U.S. zone system, F

THROUGH ROUTES
SECONDARY ROUTES

CASA GRANDE, ARIZ.
Edition of 1924

THE TOPOGRAPHIC MAPS OF THE UNITED STATES

The United States Geological Survey is making a standard topographic atlas of the United States. This work has been in progress since 1882, and its results consist of published maps of more than 40 per cent of the country, exclusive of outlying possessions.

This topographic atlas is published in the form of maps on sheets measuring about 16½ by 20 inches. Under the general plan adopted the country is divided into quadrangles bounded by parallels of latitude and meridians of longitude. These quadrangles are mapped on different scales, the scale selected for each map being that which is best adapted to general use in the development of the country, and consequently, though the standard maps are of nearly uniform size, they represent areas of different sizes. On the lower margin of each map are printed graphic scales showing distances in feet, meters, and miles. In addition, the scale of the map is shown by a fraction expressing a fixed ratio between linear measurements on the map and corresponding distances on the ground. For example, the scale $\frac{1}{62,500}$ means that 1 unit on the map (such as 1 inch, 1 foot, or 1 meter) represents 62,500 similar units on the earth's surface.

Although some areas are surveyed and some maps are compiled and published on special scales for special purposes, the standard topographic surveys for the United States proper and the resulting maps have for many years been divided into three types, differentiated as follows:

1. Surveys of areas in which there are problems of great public importance—relating, for example, to mineral development, irrigation, or reclamation of swamp areas—are made with sufficient accuracy to be used in the publication of maps on a scale of $\frac{1}{31,680}$ (1 inch = one-half mile), with a contour interval of 1, 5, or 10 feet.

2. Surveys of areas in which there are problems of average public importance, such as most of the basin of the Mississippi and its tributaries, are made with sufficient accuracy to be used in the publication of maps on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile), with a contour interval of 10 to 25 feet.

3. Surveys of areas in which the problems are of minor public importance, such as much of the mountain or desert region of Arizona or New Mexico, are made with sufficient accuracy to be used in the publication of maps on a scale of $\frac{1}{125,000}$ (1 inch = nearly 2 miles), with a contour interval of 25 to 100 feet.

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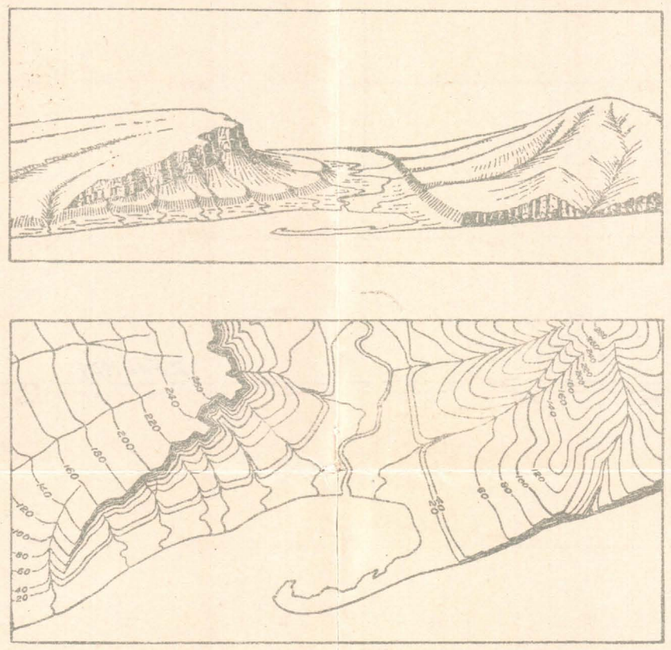

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