



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

The following file is part of the Walter E. Heinrichs, Jr. Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

October 10, 1975

Mr. Arthur W. Jacobs
379 S. Craycroft Road
Tucson, AZ 85711

Re: Magnetic Survey
Prosperity Claims
Pima County, Arizona
GEOEX Job #1044

Dear Mr. Jacobs:

As you requested last week, this is a brief letter explaining the magnetic survey we recently completed for you on the Prosperity Claims in the Pima Mining District for this year's annual assessment work.

We used a GeoMetrics model G-816 proton precession total field magnetometer, with the sensor on an eight foot shaft, to obtain the data. The values on the contour plan map are the total field readings in gammas minus a 49,000 gamma datum. Ideally as more magnetic material is crossed, the total field values will increase, thereby allowing a means of crudely mapping the magnetite content of various rocks. Conversely, rock type can sometimes be mapped through differences in their magnetite content. Also, some ore bodies are associated with increased magnetite content and can therefore sometimes be located magnetically.

Several copper deposits in the Pima District have a magnetite association, notably the Pima Mine which was discovered magnetically. Therefore, the magnetic technique was felt to have applicability to your area.

The results show several magnetic anomalies deserving discussion. The most prominent anomaly is the magnetic high on Lines 4 and 7 near the Prosperity "A" point of discovery near the south property boundary. This anomaly has a total high to low amplitude of about 950 gammas or what might be classed as ammoderate strength anomaly. This anomaly is an extra strong part of an east-west high trending through the entire width of the area surveyed. Field observation showed this elongate high to directly correlate with and in all likelihood be caused by an east-west mafic dike, perhaps diorite or andesite and is felt to not have any particular economic significance. Typically, mafic rocks have more magnetite content than the lighter colored granite rocks.

Mr. Arthur W. Jacobs

-2-

October 10, 1975

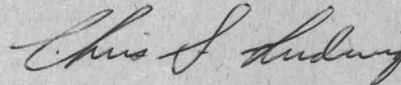
A less pronounced magnetic high starting from the main magnetic high and trending northwest therefrom is probably a similar dike.

The only other anomalism of note is the low directly south of and the high directly north of the microwave tower. This anomalous response is probably caused by the iron tower and surrounding iron fencing.

In conclusion, nothing was noted in the magnetic data which would appear to have much economic significance at this time. The rest of the map shows some magnetic variation of the degree that is typical of a granite such as exposed over most of the property.

We hope this is of some help to you and if you have any further questions, please let us know.

Sincerely yours,
Heinrichs GEOEXploration Company



Chris S. Ludwig
Chief Geophysicist

CSL:jh
cc : Extra encl.

REPORT OF GEOPHYSICAL SURVEY

On August 30, 1975 at a cost of at least \$300.00, Heinrichs GEOEX-
ploration Company conducted a total intensity magnetic geophysical survey on
the contiguous group of three claims enumerated on the attached Affidavit of
Labor, in the Pima Mining District, Pima County, Arizona in fulfillment of
the current annual assessment work requirements.

A total of nine (9) parallel north-south lines of total field magnetic
coverage were completed with a station spacing of 50 feet. The total number
of stations occupied was 188. A "Total Magnetic Intensity Contour Plan"
showing these nine traverses and the magnetic stations relative to the claim
boundaries and points of discovery, is attached to and hereby made a part of
this report.

This geophysical survey work applies to and benefits the claim group
as a whole.

Heinrichs GEOEXploration Company personnel involved in this work were
Chris S. Ludwig, Chief Geophysicist with over 12 years experience. Over all
direction was by Mr. Walter E. Heinrichs, Jr., President and General Manager
of Heinrichs GEOEXploration Company, and a registered professional engineer
with over 34 years experience.

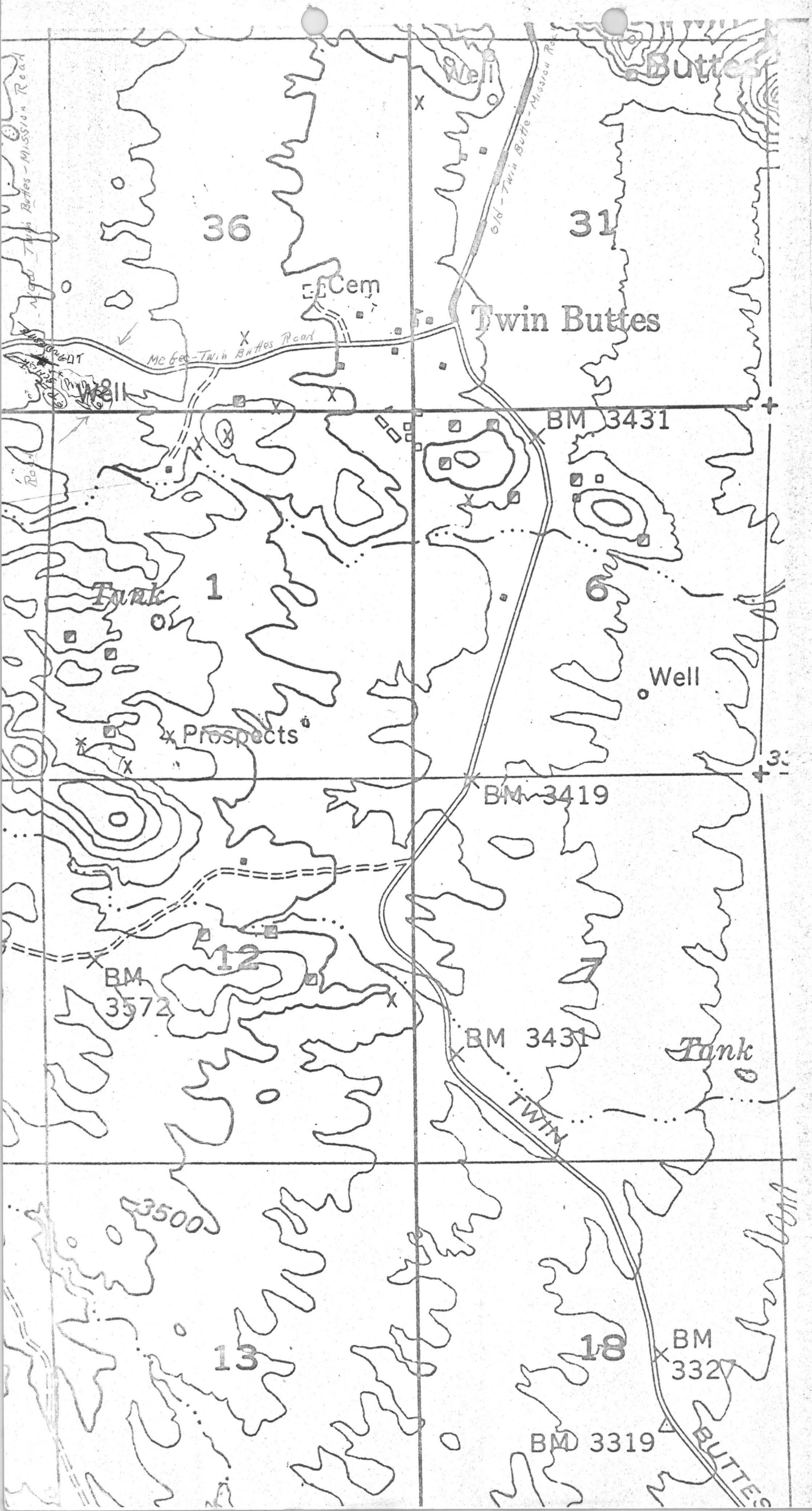
The basic findings of this geophysical survey are presented in the
form of the attached "Total Magnetic Intensity Contour Plan" which shows the
total intensity magnetic field strength values in gammas relative to a
49,000 gamma datum plotted next to each of the 188 stations, thereby showing
the relation of these basic findings to the claim boundaries and points of
discovery.

Heinrichs GEOEXploration Company

Chris S. Ludwig
Chris S. Ludwig
Chief Geophysicist

Approved:  *Walter E. Heinrichs, Jr.*
Walter E. Heinrichs, Jr.
President & General Manager
W. E. H. 688

September 22, 1975
P. O. Box 5964
Tucson, AZ 85703



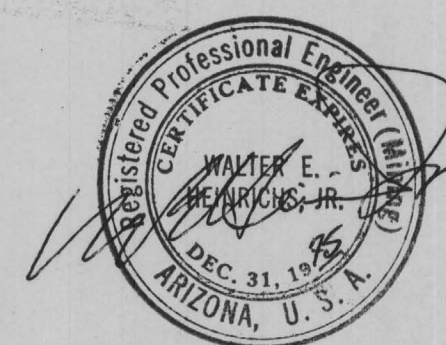


TOTAL MAGNETIC INTENSITY
CONTOUR PLAN
of the

PROSPERITY CLAIM GROUP
PIMA MINING DISTRICT
PIMA COUNTY, ARIZONA

for
MR. ARTHUR W. JACOBS

by
HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5964, TUCSON, AZ. 85705
JOB NUMBER 1044 SEPTEMBER 1975



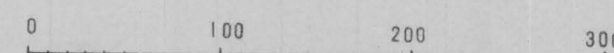
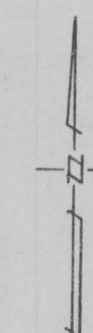
• 823 MAGNETIC DATA STATION
AND VALUE IN GAMMAS

— MAGNETIC CONTOUR

— CLAIM GROUP OUTLINE

CONTOUR INTERVAL: 100 GAMMAS

BASE MAP FURNISHED BY CLIENT



MAGNETIC DATUM: 49,000 GAMMAS

