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POSSIBLE MINERALIZED AREAS AS  
INDICATED BY AERIAL MAGNETICS

Walker-Martel Mining Company

By Bob Redmond

"POSSIBLE MINERALIZED AREAS AS INDICATED BY AERIAL MAGNETICS."

With our recent success in localizing a large area of mineralization on the Calico Project, using aerial and ground magnetics, other localities with possibly similar environments become of major interest for exploration targets.

One such area is that located in T12-13N., R27-28E., in the northern part of the Wassuk range, Mineral County, Nevada. The particular area of interest is indicated by the red pencil outline on illustrations 1, 2 & 3.

The aerial magnetic maps, illustrations 2 & 3, 1 inch equals 2 miles, suggest that this particular locality is almost identical to that found over the Lyon deposit, illustration #4, with the single exception that the magnetic features under discussion cover an area many times larger than the Lyon. Individual magnetic highs are from the same size to three times the areal extent of the Lyon deposit. The area under discussion covers approximately 44 square miles as compared to the 4 square miles which comprise the Lyon area.

Extensive drilling in the Lyon area indicates the presence of a well developed Skarn on the flanks of a granitic intrusive complex, which has been modified by low angle faulting. The mineralization consists of magnetite, pyrrhotite/pyrite, pyrite, pyrite/chalcopyrite, associated with abundant chloritization, silicification, and those mineral assemblages characteristic of skarn development in limestone and dolomite environments.

Examination of the aerial magnetics, illustration #5, indicate several interesting features:

1. There appears to be a relationship between the aerial magnetic pattern and the major fault pattern (major NW-SE, minor NE-SW). In general the magnetic highs and lows are elongated in the major structural direction NW-SE, with localized modification along the secondary pattern NE-SW. This suggests that the intrusive action, with subsequent skarn development (where the host is favorable for skarn development) has been confined to those areas tributary to structural planes of weakness.

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2. From the Lyon deposit northeast, there is a re-occurring pattern of localized magnetic highs clustered around well defined magnetic lows. Drilling has proven that two of these magnetic highs, Calico and Lyon, are related to sources containing large volumes of magnetite, pyrrhotite and lesser amounts of pyrite and chalcopyrite.

3. Illustration #4 is the aerial magnetic pattern obtained at an average 500 foot elevation over the Lyon deposit. The pattern is explained by a magnetite rich skarn development in favorable host rock around the flanks of a intrusive, granitic complex.

4. Illustrations #2 & #3 show a similar pattern to that exhibited by the Lyon deposit but on a much larger scale. The suggestion here is again that the magnetic low represents an intrusive complex , surrounded by skarn development, represented by the three magnetic highs.

5. Preliminary geochemical work within the areas encompassed by the magnetic highs on the east flank of the Wassuk Range, shows above average amounts of copper and zinc present in the surface rocks. In one locale, disseminated galena was found in a limestone bed. More intensive geochemical study within this general area might well point up a zonal pattern around an intrusive center. Numerous dikes crosscut the sedimentary rocks in the area of the lead mineralization. Some appear to have carried sulphides which have been oxidized. The amount of low grade mineralization present, intrusive features such as dikes, sills and quartz veins, the general overall silicification, all suggest the nearness of a large intrusive mass of possible economic interest. ✓

6. Drilling in both the Lyon and the Calico areas has shown that wide-spread alteration normally thought to occur with ore deposits is not found here. When extensive mineralization is nearby the only obvious favorability criteria is wide-spread silicification. The magnetic patterns offer considerable help in solving the problems of localization of this particular type mineralization.

7. Illustration #1 is the general geological map of this area. There does not seem to be any significant correlation between the rocks that outcrop

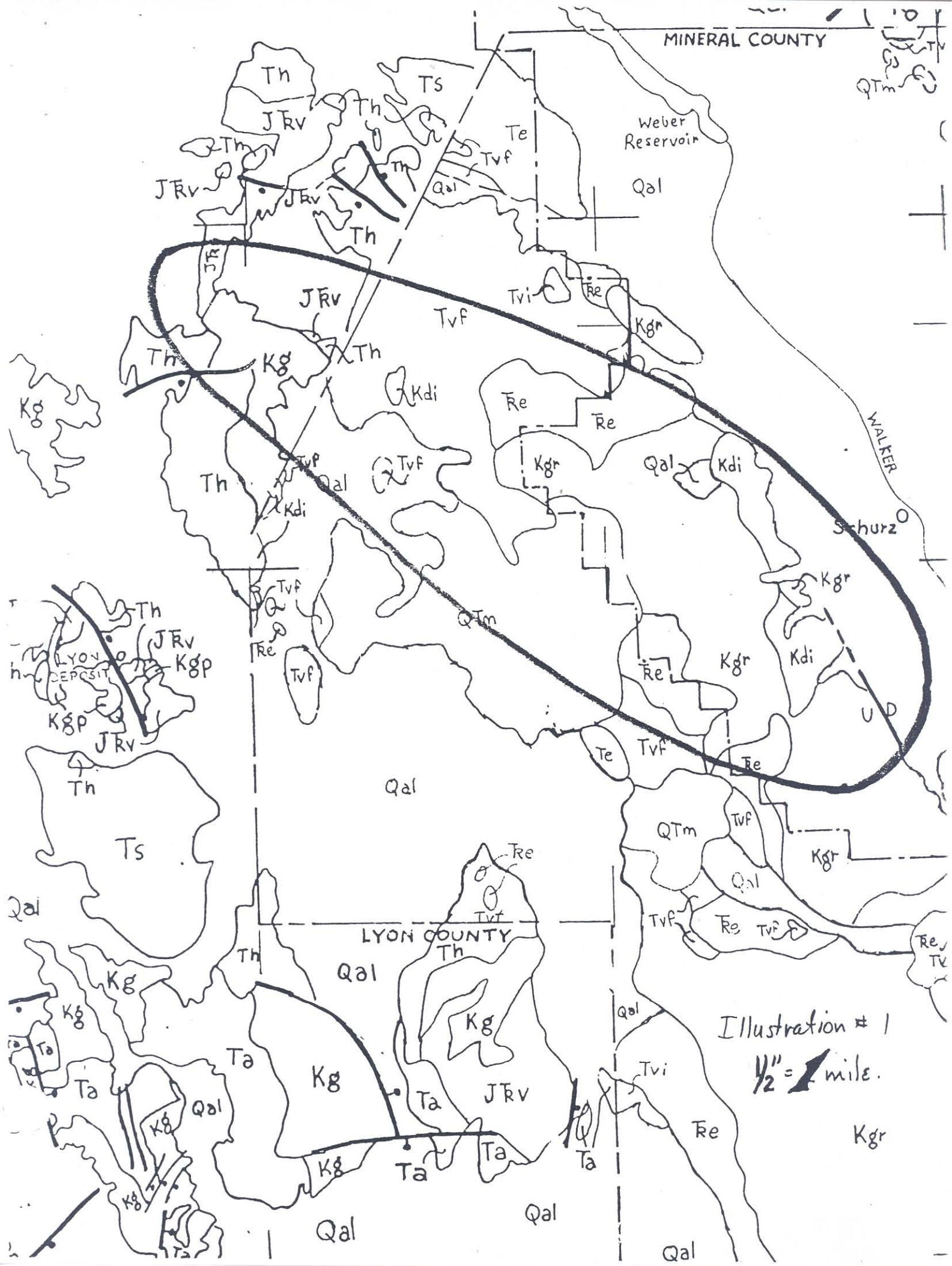
and the occurrence of the magnetic highs and lows. This suggests that the magnetic pattern is derived from subsurface conditions with minor modification from overlying surface rocks.

#### RECOMMENDATIONS

1. Aerial photo structural study.
2. Geochemical studies.
3. Completion of the ¼ mile line spacing, 2000 foot elevation, total intensity, aerial magnetic survey.
4. Reconnaissance type I.P. survey across both magnetic lows and magnetic highs. i.e.; magnetic low directly to the northeast of the Calico project and the attendant magnetic high which lies east-northeast of that low.
5. Applied potential method in the Calico area. ( Sargis Recommendation )
6. Dependent on study results, one or two drill hole tests for informational reasons.

Robert L. Redmond 7/11/66  
revised 3/27/67.







4N

3N

1N

IND

LYON

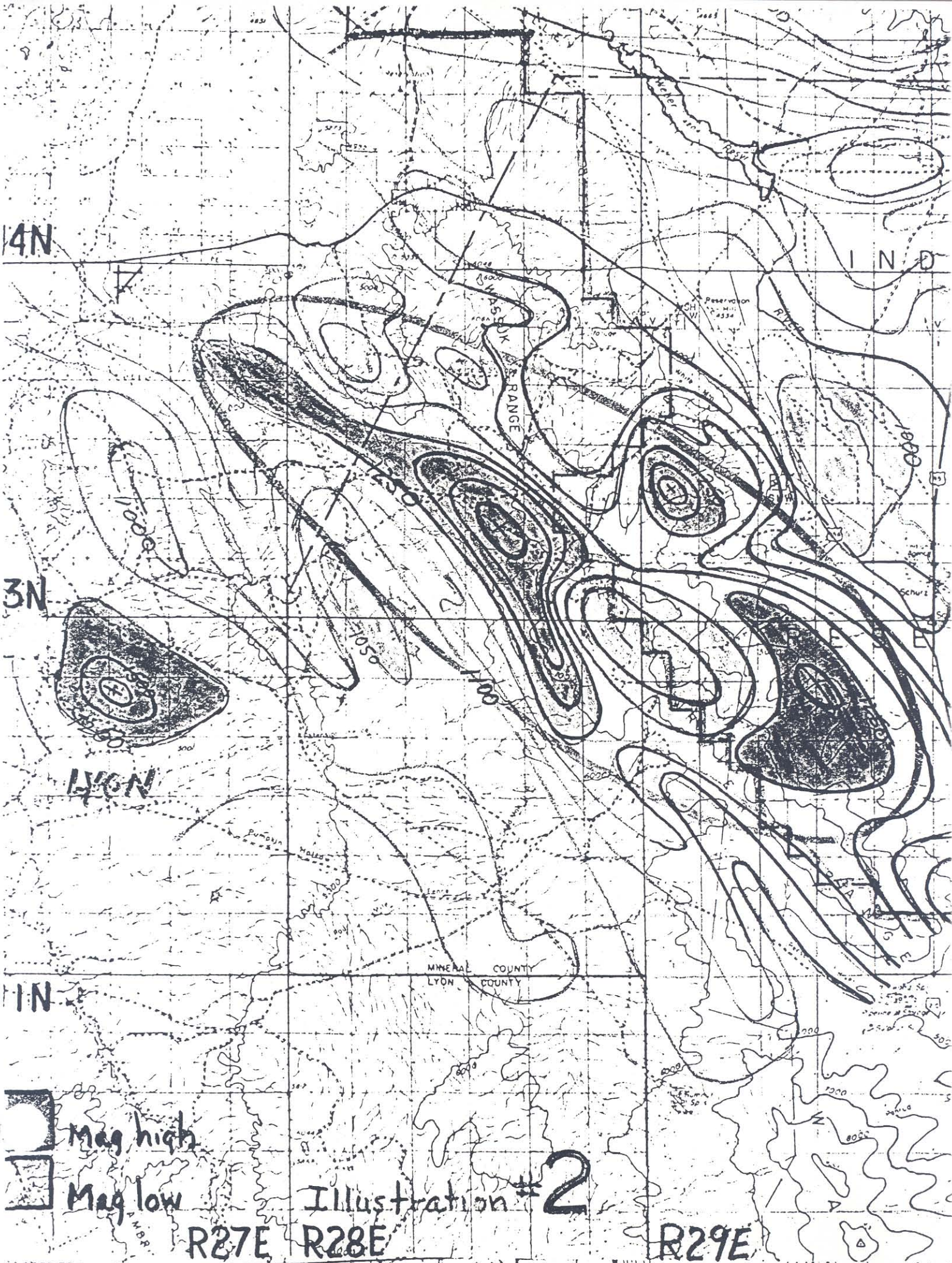
MINERAL COUNTY  
LYON COUNTY

Mag high  
Mag low

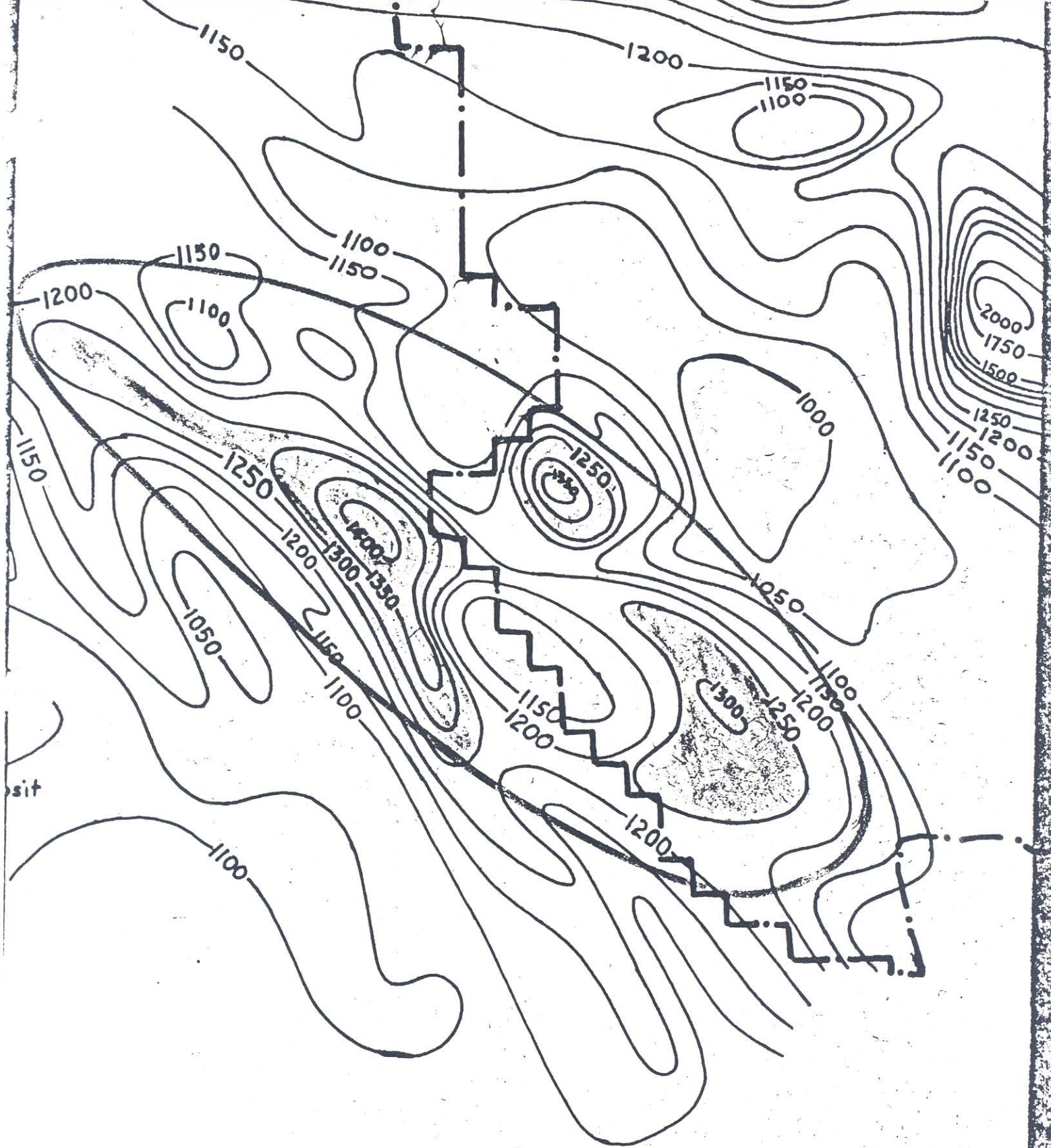
Illustration #2

R27E R28E

R29E







WALKER RESERVATION AREA  
High Elevation Magnetics  
 $\frac{1}{2}'' = 1 \text{ mile}$   
Contour Interval 50 gammas

Illustration # 3.



LEON ARM MICHIGAN

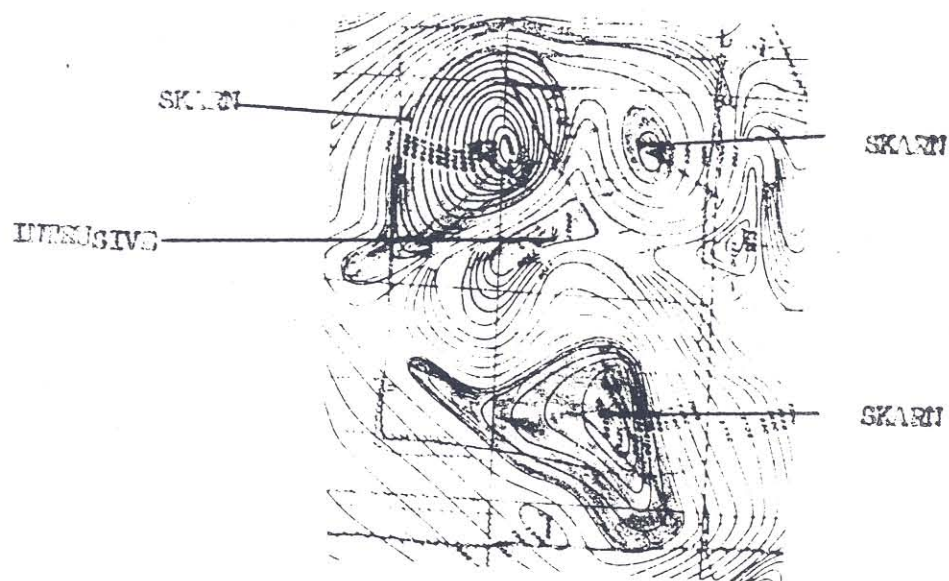


ILLUSTRATION # 4

1 inch equals 1 mile.

LEON AREA MAGNETICS

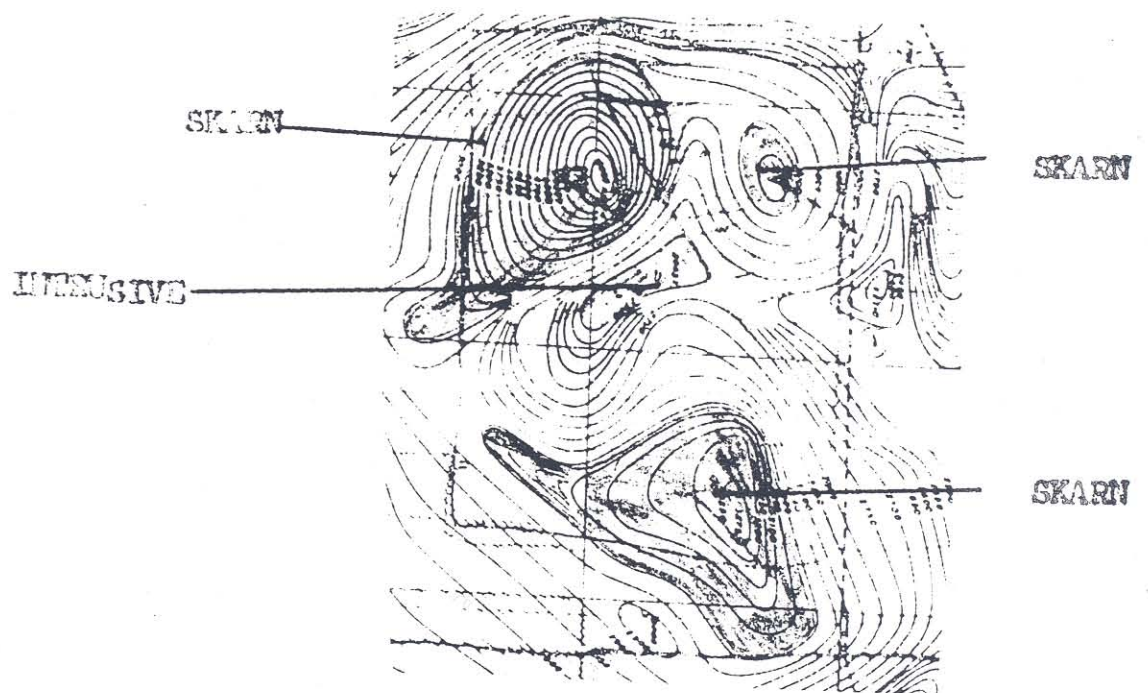


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