## Discussion and Summary

As shown on the Survey Plats, Sheets 1, 2 and 3 of 3, the results of our survey show some rather drastic variations between corner positions indicated on the original notes and plat and the actual corner locations. These variations between the corner locations shown on the original plat and field notes and the actual corner positions found, made searching for the lost or obliterated government corners extremely difficult. For example, the found, original Northwest corner of Section 28 bears North 0° 07' 41" East for 2599.33 feet from the found original West 1/4 corner of Section 28, but the found, original Southwest corner of Section 28 bears South 9° 20' 29" West for 3056.74 feet from the same West 1/4 corner of Section 28. The original notes state that these three corners on the West side of Section 28 are on a North-South line 2640 feet apart.

Only two original corners were found in the three miles along the South line of T6S, R43E which were surveyed. The area of the calculated position for each 1/4 corner and section corner along the township line was thoroughly searched and, in addition, we attempted to use topographic calls to determine locations for lost corners on the township line. The original field notes show that the Southwest corner of Section 35 falls within 0.04 chain of Excelsior Gulch and, additionally, that the original surveyor crossed a ditch 4.5 chains West of the corner and another ditch 5.75 chains East of the corner. Excelsior Gulch is in a steep canyon and has not changed location appreciably since the original survey was done. Remains of the ditches mentioned in the original notes are still evident. Using a second compass and the original bearing and Electronic Distance Measuring equipment, we positioned ourselves on the record bearing at the record distance between the ditches and measured down to Excelsior Gulch, we only missed the gulch by 35 feet from the record calls and made a thorough search, without results, for the corner. When we positioned ourselves as previously described, we found that we were some 700 feet North of where the calculated corner position would fall. Even though the topographic calls were suspect in the case of the Southwest corner of Section 35, the topographic calls fit reasonably well when applied to the calculated position of the Southeast corner of Section 35 and the South 1/4 of Section 35.

Based in part on the previous evaluations of record topographic calls, I decided to use single proportion measure along the township line to restore the lost corners.

In summary, I would state that in my opinion, the substantial variation between the record bearings and distances and those actually found were a result of the original surveyor not running the lines in the normal order as his field notes show, but that he apparently was running East-West along section lines at one mile intervals and "stubbing" the 1/4 corners North or South, as the case required.

WRW:igp

PROFESSIONAL LAND SURVEYOR William R. Wells

OREGÓN JULY 22, 1977 WILLIAM R. WELLS 1108 William R. Wells, P.L.S.

Page 2

FILED Nov. 3, 1978

BAKER COUNTY SURVEYOR

SURVEY NO. 6-43-13