ON A HISTORICAL NOTE:

The Vermejo Park Ranch property emerged from two Spanish/Mexican land grants dispensed in the early 1800s: Sangre de Cristo and Maxwell. At the time, Mexico had declared independence from Spain and sought to colonize the sparsely populated territory that includes what is now New Mexico. Much like its Spanish predecessor, the Mexican government awarded these land grants through inconsistent and often vague laws, particularly in the case of the Maxwell Land Grant of 1841, then known as the Beaubien-Miranda Grant.

The grant encompassed nearly two million acres. Charles Hypolite Beaubien, a 23-year old trader from French Canada, and his friend, Guadaloupe Miranda, petitioned for the land. The petition was granted by the Santa Fe governor, but it was two years before the two took possession by some rather odd means. With five witnesses, says one report, and a justice of the peace, Beaubien and Miranda walked some of the property throwing earth and pulling weeds to show evidence of possession. And then, the report continues, the justice of the peace declared Beaubien and Miranda in possession of the property. As was to be expected, the ownership of a large grant by these means made some people very angry. Within a year, the grant was revoked because of Indian rights violations and illegal legal processes. However, it was reinstated two months later through the Santa Fe legislature.

In the meantime, Lucien B. Maxwell, a trapper and scout from Kaskaskia, Ill., had married Beaubien's 13-year-old daughter and settled on the Beaubien-Miranda Grant in 1849 at Rayado. After the death of Beaubien in 1864, Maxwell began buying out the remaining heirs of the Grant property and by 1865, was sole owner of more than 1.7 million acres of property. It was the discovery of gold that caused Maxwell to take a chance that doomed the grant. He invested a fortune in gold and mining, lost it, and ended up selling the ranch to three financiers for about \$750,000 in 1870. The sale caused a revolt among the area's colonists that lasted for another decade before the U.S. Supreme Court decided ownership of the land in 1887.

Since that time, the property has changed hands many times, finally ending up with Pennzoil Corporation's Vermejo Park Corporation in 1982, and in 1997 by Ted Turner. Not once in all those changes of ownership and resulting controversies has the property boundaries ever been completely defined—that is, until now.

the rest of the project. Within moments, a seemingly hot, dry day turned into a driving rainstorm or worse.

Just two weeks into the project, survey crews were running control loops up the Ponil Canyon 10 miles north of the village of Cimarron. Around midday the rain began to fall steadily. Going on intuition, the crew decided to sus-

pend further data gathering for the day. It turned out to be a wise decision. A tornado hit Cimarron and the surrounding area, causing considerable damage within moments of those crews arriving back in Raton.

Not long after, the other crew that was working the Dawson line in the middle of the Vermejo Ranch ran into sudden rains that caused flash flooding, turning the Vermejo River from its normal 6 to 8' wide to 100 to 150' wide.

Setting control took survey teams one mildly stressful month, but effectively prepared them for the extensive data gathering efforts still ahead.

Starting at the Top

Just as in the control phase of the survey efforts, New Mexico's unstable weather patterns continued to be a constant battle for our survey crews. It was already planned that we would survey the higher elevations, such as Baldy Mountain in the Sangre de Cristo mountains, first to minimize the possibility of an early snow. On top of this, the ranch is home to numerous species of wildlife including mountain lions, bear, buffalo, deer, turkey, grouse and antelope. Most of these creatures didn't mind a minor intrusion, but others were more territorial and commanded a certain amount of respect and distance from our crews.



A crew member at an elevation of 11,000' on top of Ash Mountain.

We started the boundary survey in two sections: Heck Ranch and the Northwest Quadrant. The Heck property consists of 11,000 acres near Cimarron. The Northwest Quadrant contains 150,000 acres. The Northwest Quadrant would involve the resurvey of 13 miles of the west line of Vermejo Park Ranch. This line goes along the top of the Snowy Range line with elevations ranging from 10,000 to 13,000' in the Sangre de Cristo mountains. In this, as in many other situations during the surveying operation, we relied on the ingenuity of Jon Pendergraft, owner of Pendergraft Surveying Company in Portales, N.M., to reach remote points in a timely and safe method.

One of the more memorable parts of the entire job was surveying the 11,000-acre tract called Greenwood. The southwest corner of this piece is on top of Baldy Mountain at