# A first mapping of the overland route, Antigua California to San Diego, 1769

Harry W. Crosby La Jolla, California

In 1967, I contracted to climb on a mule and follow and photograph the route employed in 1769 by Governor Gaspar de Portolá and Father Junípero Serra, from Loreto in Baja California to San Diego in Alta California. I looked in vain for a map, but I was able to get copies of four diaries penned during that part of the expedition. From them I derived a consecutive list of place names, south to north, which I planned to use as a guide.

When I started my ride in the south, I had little trouble getting local guides to take me over the old route -- no surprise, I would later learn, because in the lower parts of the peninsula most of the place names mentioned by eighteenth century travelers survive in local lore. However, by the time I was three days north of Velicatá, the site of Misión San Fernando, exactly the place where the 1769ers jumped off into terra incognita, I found that only an occasional name used by a diarist was recognizable to local people. Carlos Espinosa, my guide at the time, had an intimate knowledge of the country we needed to pass through, and with the three recognizable place names I was able to give him, he took me over logical trails and delivered me to San Telmo, the terminus of my mule-back venture.

Unfortunately, the best map at that time was on a scale of 1:500,000 and thus impossible to relate to the diaries as one can do today with a map on fully 10 times the scale. (In 1974, the Mexican government agency CETENAL, the Comisión de Estudios del Territorio Nacional, issued a superb series of maps covering the entire state of Baja California on a scale of 1:50,000 [1 mi. = 1½± in.], with elevation contours at 20-m [67-ft.] intervals. Baja California Sur was added to the series in 1982.) As a result of that deficiency, my 1967 attempt to follow the northern part of my assigned route was marred by several choices of alternate trails that allowed me passage, but not in the footsteps of Captain Rivera and his pioneer troop. For years afterward, I continued to wonder that California historians had traced and mapped that expedition's route in minute detail northward from San Diego as far as San Francisco Bay, yet ignored its first leg in what would later be called Baja California.

In 1993, I finished work on *Antigua California*, my study of Jesuit California. Then, with better maps in hand, I began to look anew at Spain's move into Alta California, the first great step in post-Jesuit California history, and was reminded of the problems I faced in 1967. Returning to the journals written by men who rode north to San Diego in 1769, I immediately saw many correspondences between their descriptions of their route and these new maps, and concluded that now their route could be identified and rather exactly placed.

Considering the diaries themselves and analyzing their limitations as well as their factual content, I noted that all four writers -- José de Cañizares and Fray Juan Crespí in the first wave of the expedition, and Serra and Portolá in the second -- were relative newcomers to California. Their fresh perspectives had both advantages and disadvantages. On the positive side, the novelty of what they saw led them to record observations that men long in the land would have regarded as commonplace knowledge that needed no report. Thus we are told much about

terrain, plants, animals, and native people that might have been omitted by an old hand. On the negative side, the diarists were not familiar with the problems of travel (needs of the animals, saddle or pack; difficulties in locating trails; hardships in crossing certain obstacles) and therefore did not report them in detail or perhaps report them at all. If one of the diarists had been among the 10 designated scouts, we might have been told, for example, more about their reported tracing of Indian trails as they chose the route for the following day's march, possibly even some mention of the clues they depended on in making their evaluations.

Nevertheless, however imperfect for the needs of modern investigators, these diaries, particularly those of the first party, provide enough facts to retrace the party's route from Velicatá to San Diego, and retrace it within narrow margins of error.

I have always involved others in my fieldwork for reasons of companionship, safety, and added expertise. In 1995, maps and diaries in hand, I enlisted my longtime friend and onetime student William H. ("Skip") Price, an experienced mariner and navigator. Our first step was to study map and diaries simultaneously and propose an "armchair" route, something we could carry into the field for a first-hand comparison with the terrain. Fortunately, we were not faced with 250 mi. of pure question marks. I soon worked up a list of sites that could be confidently located within very restricted areas.

- The expedition's 25 March campsite still bears the name used in 1769: San Juan de Dios.
- The 26 March and 27-28 March campsites were in Arroyo de los Mártires, demonstrably the watercourse that still bears that name.
- The 1-2 April campsite, "La Cienegulla," was in a dry lake bed, a sink at the base of a high scarp -- a place unique in the region, as may be seen by studying aerial photos. In 1967, Carlos Espinosa identified it from the descriptions, compass directions and distances given in the diaries, and took me there to make photographs.
- The 4-5 April campsite, called San Isidoro by Fray Juan Crespí, retains that name to this day.
- The 10 April campsite was where Manuel Valladares, Juan Crespí's neophyte assistant, died and was buried. The watercourse has borne his name ever since.
- The 14-15 April campsite was dubbed "San Telmo" by Crespí, and known as such ever since.
- The 16 April campsite, named San Rafael by Crespí, gave its name to the entire arroyo and to two villages, San Rafael Abajo, located close to the 1769 camp, and San Rafael de Arriba, 3 mi. upstream.
- The 17 April campsite was pitched at the mouth of a narrow gorge with unusually saline waters, which opened off an arroyo running from northeast to southwest. This corresponds closely -- and, in the area, uniquely -- with Cañón El Saladito which opens off the arroyo long and aptly called El Salado.
- The 2-3 May campsite was in what is now the downtown waterfront of Ensenada, a place the 1769ers knew from maps created by Spanish navigators.
- Finally, the diarists described most of their route north of Ensenada as near the seashore, much of it on the narrow coastal shelf that offers little opportunity for major errors in mapping.

So, with these places securely located, or at least located in restricted areas, our job was to interpolate the remaining campsites and work out a route by means of the reported compass directions followed and the hours and distances traveled. This we did, always aware of the

diarists' descriptions of the landforms they traversed and always consulting the map as to the apparent feasibility of whatever route we proposed.

To facilitate our work, we trimmed the maps so they could be accurately overlaid to make transitions at the edges. We adjusted our planimeter to read leagues (*leguas*), the diarists' unit of distance measure, and made a scale in leagues from which we could set our dividers for any distance specified as a day's travel.

Using the diaries of Cañizares and Crespí, we began at the site of Misión de San Fernando (shown on the CETENAL map), and swung off an arc in a northerly direction and at a distance of 1½ leagues, the distance estimated by the diarists for their first day's travel. This arc crossed an arm of the arroyo identified clearly by both eyewitnesses, so we assumed this as our first campsite. The second night's camp was at a known historical location, San Juan de Dios, also on our base map. However, in local usage, place names often are moved up or down watercourses, usually in response to the relocations of ranches. We needed to see if the approach from the south to the place bearing that name today would match the diarists' descriptions. In the case of San Juan de Dios, the approach to the place located on our modern map appeared to match that depicted in the diaries. Provisionally then, our second camp was located, and we moved on to the third, and so on until we reached another one of our securely located positions.

At each of those points in which we had confidence, we took stock, and if the days and campsites we had postulated did not fit comfortably into the space between one secure position and another, we went back and refigured, aware that the diarists did not always agree on estimates of distance traveled or on compass directions followed, and that, even when they agreed, they could be demonstrably mistaken by a mile or two in a day's travel, or by an eighth of the compass or more in reporting a direction.

In the final analysis, we added the criterion of probability to all of our hypothetical conclusions. We studied the contours of our highly detailed maps for clues as to which in each pair of potentially alternate stretches of trail was the more traversable. When completed, our proposed route, marked on 1:50,000 maps, appeared on 18 sheets (each about 22 in. high and 25 in. wide). Had the whole been assembled, it would have been over 24 ft. tall!

Later in 1995, we made our first field trip with a group of friends in two four-wheel-drive vehicles, our objective being to look for informal roads that might cross or parallel problem areas in our "armchair" placement of the 1769 route, to observe the countryside and question the local people. We chose the most accessible approach: Mexican Highway 1 from the border to San Quintín, then east on a terracería (graded dirt road) that would take us to Rancho El Salto, 24 airline mi. from the highway, but 30 by road. We arrived at El Salto with no problem, turned north, and soon arrived at a brecha, a wheel-track road that we reasoned should parallel our proposed route. Here for the first time, and one of few times on any auto trip, we were able to see and traverse our conjectural trail, and better yet, come away feeling that no reasonable alternative had presented itself. (The segment in question was that traveled by the Rivera party on the morning of 1 April 1769.) After we returned to the graded road, we visited El Rosarito and Rancho San Miguel, looked for and spoke to men familiar with local trails, then headed southwest for more advice at Rancho San Antonio, an inhabited place near our tentative expedition trail. At each stop, we showed our maps and took notes on the information or suggestions offered. Essentially, we found that most of our problem stretch of trail lay in areas that had no roads, only riding trails, well-known and still in use. We ended by going south and rejoining the paved highway some 27 mi. east of El Rosario.

Our field trip had established the current remoteness of most of the first half of the

1769ers route, and we were led to conclude that a mule-back expedition would be required to evaluate our hypothesis. A subsequent shorter auto trip took Skip and me to San Telmo and Rancho Valladares, both more or less on the original trail and lying at the northern end of the area we proposed to ride through. That excursion produced little information; we found few older men in residence, and those were poorly familiar with the terrain to the southeast.

In May 1997, after much planning and arrangement making, Skip and I headed south, accompanied by my sons-in-law, William Decker and Daniel Barba, their sons (my grandsons) Reed Decker and Grant Barba, and saddle-maker extraordinaire Gary McClintock. Old friends Eve Ewing and Fritz Liebhardt came with us as drivers to return our cars to San Telmo, where we planned to end our muleback venture. Near San Juan de Dios, we joined, by prearrangement, Arturo Villavicencio and Miguel Angel Ojeda, cowboys and experienced guides from the central part of the peninsula, and Jesús ("Chuy") Flores, an older cowboy supposed to have ridden the trail we planned to follow. Arturo and Miguel Angel had trucked up most of the animals we would need, and Arturo immediately supplemented them with two mules rented from nearby Rancho Cerro Prieto.

By the end of a long day, we had said goodbye to our drivers, and we, our guides and our animals were assembled on the south bank of Arroyo Grande at the site called El Sauce de Carter (Carter's Willow), named and perfectly placed on the CETENAL map, as we quickly learned from our GPS instruments. The following day, after the usual deliberations and delays of a first loading up, we set off to the west down the arroyo, which, it must be explained, is now called Arroyo Grande in its upper stretches, but in earlier times was called Arroyo de los Mártires, as its lower reaches are to this day.

Thus began our 10 days on mule-back, an adventure of which I offer only a brief synopsis. Suffice it to say that the two boys, eight and 10 at the time, had great times and performed more than ably, adding a lot to the pleasure of their fathers and grandfather. All else went well until we reached San Isidoro on our sixth day. There, our oldest guide, Chuy Flores, fell while walking over a rock pile and severely bruised or possibly broke a hip; he was in pain. We immediately headed for the coast and the paved road, but oddly, that did not end our quest. Two days or so of our most direct route to medical assistance lay along the very trail we had figured for the 1769ers. We set out with Chuy as sedated as we could manage with aspirin and the like, Miguel Angel riding beside him, the pair lagging to allow a more comfortable pace. The rest of us and most of the pack animals pushed on and continued our observations of the route.

On the morning of our ninth day, at the point where we figured that Rivera and company had left Arroyo de San Antonio to climb over a high ridge into Arroyo de Valladares, we had to abandon our map quest and continue down the arroyo to reach people with telephones and automobiles. By that night, we were camped near Santo Domingo, Chuy had been driven off for medical help and son-in-law William had found a ride to San Telmo where he could recover his car. The next morning he was back and we were on our way home, leaving Arturo and Miguel Angel to retrace our steps to San Juan de Dios where their trucks awaited them.

The following year, 1998, Skip and I decided to return to the point where our mule-back inspection ended. The stretch of trail as yet uninspected was not long enough to justify obtaining guides and animals; we elected instead to drive inland from San Telmo to Rancho Valladares, only 2 mi. or so up-arroyo from our inferred 1769 campsite. From there, we would walk downstream to find a suitable camping place of our own, then go the next day on foot to climb the ridge to the south and work along it to try to locate the most probable pass and the trail up to it from Arroyo de San Antonio, a point we had identified as probable when we rode by the year

before.

For this venture, we were able to enlist the added company of friends and Baja California aficionados William Evarts, photographer, Lowell Lindsay, publisher, Graham Mackintosh, writer, and Gabriel T. Arce, Jr., an Angeleno with relatives in our immediate target area. We arrived at Valladares, left our two vehicles at the ranch, carried our camping gear about 1 mi. down arroyo and found a broad, sandy shelf on which to pitch camp.

Early the next morning, 7 July, we hiked almost due south to the ridge and found ourselves looking down at the San Antonio watercourse well over 1,000 ft. below. Then we made our way west along the jagged ridgeline, looking for signs of a feasible approach from below and for evidence of a pass used for transit by any sort of animal traffic. About noon, we came to a promising window in the ridge. I hiked up to investigate, and Skip headed farther west to a second potential pass. Mine proved to be a false alarm: just below the alluring opening in the rock wall was a 100-ft. drop-off. As I worked my way west along the south face of the ridge, I heard Skip calling out. In minutes I could see him, also on the south face, pointing down. Before him and now below me was a long, steep ridge that appeared to ramp all the way up from the floor of Arroyo de San Antonio. To our delight, it was covered with a complex of obvious and well-used cattle trails.

We had found the way between the two arroyos, and as further proof, those trails merged at the *portezuelo*, or pass, and then fanned out a bit as they headed down an open cañada leading to the watercourse in Arroyo de Valladares. Continued inspection yet farther to the west showed no other promising ramps or openings, the same observation we had made as we looked up at the ridge the year before. We went home more than satisfied with our find.

Our remaining fieldwork was done in brief forays with specific goals, events that need no description here.

One of the more problematic stretches of the 1769 route was worked out in the 1980s by Dr. Eduardo Mancillas, a professor of business administration at Universidad Autónoma de Baja California, Ensenada. In pursuing his avocation in the history of the Ensenada region, Dr. Mancillas also studied the diaries from the 1769 expedition and set out to map the tortuous route they described between Santo Tomás and Ensenada. When I heard of his work, I contacted him, and he and his wife Gloria, also an instructor at the university, invited Skip and me to their home. He showed us his mapping and then agreed to go with us over the route, or as close as our four-wheel-drive vehicle could come. We made the circuit, saw the land, looked at his map, and compared his conclusions to the entries of our diarists. It all added up splendidly. We were spared a lot of work and had made the acquaintance of a charming couple to whom we are much indebted (Mancillas 1993).

We also wish to recognize the quality of the map and fieldwork done by Virginia E. Thickens and Margaret Mollins for their "Putting a Lid on California", a translation and annotation of the diary by José de Cañizares (Thickens and Mollins 1952). We arrived at an early opinion that the maps available to them and their inability to personally inspect the trail had handicapped them to the point that we should ignore their geographic indications. For that part of the 1769 expedition south of San Telmo, our opinion was justified. But in retrospect, we see that for the remainder of the route, and particularly for the part north of Ensenada, we agreed with their conclusions (although those conclusions, in the absence of a detailed map, fell short of great specificity in locating the trail).

## Clues and conclusions in mapping the 39 days of travel

In the pages that follow, each day of travel by the first party in the 1769 overland expedition (diarists Cañizares and Crespí) is indicated by a italicized date. Next is the name in use today (if known) of the campsite at the end of that day. Place names bestowed before 1769 are marked with "(P)". Placenames bestowed by Fray Juan Crespí are marked with "(C)". Next are latitude, longitude and elevation of each campsite. Last is the alphanumeric code for the CETENAL map sheet on which it is located.

In diary quotations, times and distances are given in numerals (to save space), compass directions are given in capitalized abbreviations (NW for "northwest," etc.) and each writer's estimate of distance covered during a day's ride is followed, in brackets, by a planimeter measurement of the route we deduced for that day. Excerpts from diaries of Fray Junípero Serra or Governor Gaspar de Portolá, members of the second party, are preceded by the dates on which they experienced the stretches of trail in question. Following each day's diary excerpts are pertinent notes or observations relating the authors' personal experiences and interpretations of related data.

Starting point: Misión de San Fernando, 29°58.1' N, 115°14.2' W, 1,450 ft., H11D16.

24 March: Arroyo de los Torotes, 30°00.2' N, 115°12.0' W, 1,650' H11B86.

[Cañizares:] ... at 4:30 p.m., we all set out toward the NNE. Having traveled about 1½ leagues, we halted and pitched camp in a dry arroyo. [1.6.]

[Crespí:] [We] set out at 4 p.m. from the grand spot of Velicatá, taking a NNE course.... Upon setting out we took our way in among hills; a little after sunset, after going for about 2 hours, we made camp at a dry creek ... we must have gone 1½ leagues. [1.6.]

Our proposed route up Arroyo los Torotes, would be logical for any pack train going to San Juan de Dios. The campsite at Rancho Los Torotes closely matches the diarists' estimate of the brief first day's ride, less than 4 mi.

25 March: San Juan de Dios (P), 30°11.0' N, 115°10.1' W, 1,840 ft., H11B86.

[Cañizares:] ... at 7:30 a.m., we set out through the hills, following the course of the arroyo to the NNE. When we had gone about 2 leagues, we reached a level and pleasant stretch of country. At 12:30 p.m. we arrived, without having changed our direction, at the Arroyo de San Juan de Dios ... well supplied with pasturage, pools of water, and banks covered with trees called willows. [5½ leagues -- 5.3.]

[Crespí:] We set out from this dry creek at 7:30 a.m., keeping on a NNE course. On going about 1½ leagues, we came out of the hills and into quite open country having good sized plains; the land however is still barren and waterless. We came, at about 12 noon, to another dry creek, and then at once went up over a grade and down to the stream of San Juan de Dios; we made camp at 12:30 p.m.. 5 hours march.... [4½ leagues -- 5.3.]

[Serra; 16-20 May:] ... we arrived at the site of San Juan de Dios, an agreeable spot with abundant water, pasture, willows, tules.... The road descends from a pretty high hill down to the river and valley. But as it is well trodden down and firm, it causes no special trouble.

The CETENAL map perfectly illustrates the diarists' depictions of their ride, the hills they crossed, the level plain of Valle las Animas with its most northerly tributary wash leading to the hills they climbed to drop down into the historic site of San Juan de Dios.

26 March: Arroyo de los Mártires (P), 30°14.4' N, 115°15.7' W, 1,450 ft., H11B86.

[Cañizares:] [leaving at] 3 p.m. ... we traveled over a route to the NW by W, and then we swung to the WNW. Having advanced about 3 leagues over level country we arrived at 6:30 p.m. at an arroyo called Los Mártires, where we found pools of water and abundant pasturage. Along the road we saw ... some hills which must lie about  $1\frac{1}{2}$  leagues from San Juan de Dios. [3 leagues -- 3.7.]

[Crespí:] We [left] at 2:30 p.m. taking up a NNW course upon setting out, in among hills and then along dry creeks, and here our course changed to NW..... We entered the lush Los Mártires stream ... on going 3 hours -- and 3 leagues as well -- we made camp alongside the aforesaid stream where there was forage and water, not running but enough for everyone. [3 leagues -- 3.7.]

[Serra; 21 May:] We set out in a westerly direction; before long the shoulder of a high mountain on our right forced us to the north; we followed it ... on the right [was] a deep valley. We followed a river with trees, pasture and water.

The route from San Juan de Dios to Arroyo de los Mártires is obvious; only the campsite location raised a problem. The placement for this camp, and the next, 27-28 March, was determined by the point at which the expedition climbed out of the arroyo on the morning of 29 March (30°14.7' N, 115°21.9' W, established by inspection after advice from a lifelong resident of nearby Rancho San Antonio). Cañizares's statement that their camp for the previous two nights lay 45 minutes upstream from the place where they left the arroyo allowed us to pinpoint that camp and place the previous night's camp by proportioning the reported times and distances traveled on 26 and 27 March.

27-28 March: Arroyo de los Mártires (P), 30°14.6' N, 115°20.8' W, 1,300 ft., H11B85.

[Cañizares:] We started at 2:30 p.m., traveling WSW along the course of the arroyo; after traveling about 2 leagues we realized that we would have to make camp because it kept on raining. At 6 p.m. we stopped in the same arroyo of Los Mártires, which ... runs toward the west coast of this peninsula. We found some pools of water and, nearby, enough pasturage for the animals. [2 leagues -- 2.6.]

[Crespí:] We set out about 3 p.m., keeping along this same stream ... the course at the outset still NW, but because of the stream's windings, it was soon WSW. We stopped after 2 hours [because of heavy rain]. [2 leagues -- 2.6.]

[Serra; 22 May:] ... at 8 a.m. we set forth from the place following the tracks of the others who had gone ahead. ...  $2\frac{1}{2}$  hours of traveling ... completed the journey for that day... We could not go farther, since we had to leave the river and take to the hills; and there was a whole day's trip ahead, with an early start, so as to reach a convenient stopping place.

For notes on the placement of this night's camp, see 26 March above.

29 March: Arroyo de San Antonio, 30°18.7' N, 115°24.1' W, 1,580 ft., H11B75.

[Cañizares:] At 10:45 a.m. we set out ... toward the WNW. At 11:30 a.m. we left the arroyo, climbing an ascent which continued along the above route. We arrived, without changing our direction, at 3 p.m. at Arroyo de las Palmas. This arroyo had some willows, and ... we made camp at 3:30 p.m. on its banks. Four soldiers were sent out to look for water, and they returned about sunset and told us that a league away (following the arroyo along the west bank) there was a very good water hole. [3 leagues -- 2.8.]

[Crespí:] We set out at 10:45 a.m., leaving this stream after going a short way, and took up a WNW course. We went up a pass and came down in among hills to a dry creek; shortly thereafter the country opened out a bit, with some level areas, but these still barren and grassless [lots of cirios] ... we spent 4½ hours going uphill and down; because of the brokenness of the way, we must have made 3 leagues. We came to the stream of Las Palmas. There was no water where we made camp, but they dug a water pit and the soldiers soon reported a flow of water and good forage about a half a league farther down[stream]. [3 leagues -- 2.8.]

[Serra, 23 May:] We continued our journey, leaving the river and taking to the hills in the direction of the west coast ... we traveled 4½ hours; and for more than half of that time the road was all steep hills, rocky and tiresome, up hill and down dale, till we came to some level mesas where we found evident signs that the first division of the expedition had stopped there. We did likewise.

Our placement of this day's route follows local advice and the close correspondence between diary accounts and the CETENAL map. Of particular note is the location today of large permanent pools of water at a point downstream the very distance from our camp placement that was reported by Crespí.

30 March: Arroyo de San Miguel, 30°25.2' N, 115°24.7' W, 2,360 ft., H11B75.

[Cañizares:] ... at 1:30 p.m. we left this campsite, going toward the north, but because of detours the hills forced us to take, we swung to the NE. At 5:30 p.m. we arrived at a campsite called El Alamillo de la Tinaja, where the only water to be found was in some pools. The whole road was very difficult because of the many *barrancas* along the way, and the land continued to be barren and covered with thorns and thistles. The captain sent four soldiers to see if there was water in the place called La Tinaja, and they came back with news that there was water, but that it disappeared after a short distance. From the Arroyo de la Palmas to this camp it is 3 leagues. [3.2.]

[Crespí:] We set out due northward at 1:30 p.m. and started into a dry creek where deep sand made hard going and there was a palm or two, here and there. We came over a small pass, and the country opened out a good deal, with some plains surrounded by heights, through which we came to a dry creek ... we made camp here. A 4 hour march; we made about  $3\frac{1}{2}$  leagues because of difficult grades. [3.2.]

[Portolá; 24 May:] ... we proceeded for about 4 hours, half of the time along a very sandy gully and the remainder over a very difficult hilly country. No pasture

and no water for the animals, though there was some for the men 1½ leagues from the [stopping] place.

[Serra; 24 May:] ... our journey ... lasted 3½ hours, following half of the time a dry ravine with much sand, making the going heavy. There were a few palm trees. Then came ugly steep hills, leading to a plain encircled by mountains and crossed by a dry river.

The indicated route for both 30 and 31 March agrees well with the reported distances traveled, compass directions and portrayals of terrain. However, small variations from our route are feasible, and both campsites were placed by interpolating times and distances rather than by finding unequivocal correlations between diary depictions and present-day observations.

31 March: Arroyo de la Rinconada, 30°31.6' N, 115°24.2' W, 2,420 ft., H11B65.

[Cañizares:] At 7:30 a.m. we left camp, traveling to the N and then swinging to the NW. At 11 a.m. we arrived at the Arroyo de los Alamos, which was given its name on the last [Linck] expedition.... As soon as we started we began to climb some hills, and, in a plain near the place from which we set out, we saw a ranchería.... On this day's journey the country began to open out. It was covered with some trees called junipers.... The appearance of this Arroyo de los Alamos is beautiful. But amid all this verdure the greatest need is for water, for in order that the animals might drink, it was necessary to dig a water hole. [3 leagues --3.4.]

[Crespí:] We set out at 7:30 a.m. upon a due northward course, and so we went on, up and down over hills, and coming to bear a bit to the NNE because of some twisting about. We came, at 11:30 a.m., to the stream of Los Alamos at which we made camp after going for 4 hours, in which we must have made  $3\frac{1}{2}$  leagues. [3.4.]

See 30 March for notes on placement of trail and this day's campsite.

1-2 April: La Cieneguilla (P), 30°36.8' N, 115°25.8' W, 3,220 ft., H11B65.

[Cañizares:] At 7:30 a.m. we left traveling straight N.... We traveled all the way over level country, and at twelve-thirty we arrived at a place called La Cieneguilla (the farthest point reached by the Jesuit fathers on their expedition) where we stopped because ... there was plenty of pasturage. Almost all the way from Los Alamos to this camp there was water in marshes.

[Crespí:] ... we set out at 8 a.m. ... course due northward through very low rolling knoll ranges, one of the best roads we have had for days. We came just at noon to the spot called La Cieneguilla; a 4 hour march and we must have made 4 leagues as well. La Cieneguilla lies at the foot of a very high mountain range. Some small pools of water were found on reaching this spot, but only enough for the people; they opened a *batequi* which yielded, at a very shallow depth, all the water needed for all of our beasts, and I think they found running water not far away. [4 leagues -- 2.9.]

[Serra; 27 May:] We continued our march to the north, along the best road we had thus far encountered. It lay practically all the time along level ground, with here

and there a rise and fall; and what hills we had to cross were easy to negotiate.... After 4 hours traveling we arrived at the place called Cieneguilla. We found water, but insufficient for all the animals, so a water hole was dug.... Thus far we have followed the trail that the Jesuit Father Linck took in his exploration of 1766, according to the testimony of one of the soldiers of that expedition. From now on we have to take a different direction.

The route mapped for this day corresponds well with the diaries and demonstrably ends at La Cieneguilla ("the swamplike place"), a water catchment basin whose location perfectly matches Crespi's words: "lies at the foot of a very high mountain range." The eastern boundary of the dry lake bed brushes against the foot of the Sierra de San Miguel, rising more than 1,300 ft. above it in less than 1 mi. This catchment is recognizably unique in the region, as may be seen by studying aerial photographs or visiting the area as we did. Upon close inspection, La Cieneguilla shows the classical signs of a dry lake pan: a vast level area with evidence of watermarks on the occasional included rock piles or on the rocks at the southern edge. It also shows very evident remains of a natural dike at the southwestern extreme, a barrier now breached, which once must have made the catchment level higher than what we see today.

3 April: name of cañada unknown, 30°42.1' N, 115°28.8' W, 3,600 ft., H11B65.

[Cañizares:] At 9:45 a.m., we set out from this marsh along the edge of the Sierra Madre, going NNW and then NW. At 2 p.m. we came to an arroyo which we dedicated to San Ricardo, and we camped with much inconvenience because the arroyo was very deep and narrow. Along the road we saw three water holes, plentiful grazing land, and a great many trees -- pines, cottonwoods, willows, sycamores, and junipers. From La Cieneguilla to this Arroyo de San Ricardo, it is  $3\frac{1}{2}$  leagues. [3.0.]

[Crespí:] ... we set out at 9:45 a.m. ... taking up a course NNW veering a bit NW.... On going about half an hour, we came to a lush dry creek by which we came into a vastly handsome flat area of good soil. The width of the aforesaid flat is about ½ league, but it must be over 2 leagues in length. The first league has good soil, but over most of the second it turns to fine sand. At the foot of the hills to the west, a great deal of greenery is visible on the good soil.... 4½ hours march in which we must have made 3 leagues or a bit more, almost the entire march being made along the skirts of a high mountain range. Before stopping, we came upon three streams with running water and forage for our animals; there were a great many white cottonwoods which we viewed from some distance off at one of the streams. [3 leagues -- 3.0.]

[Serra; 28 May:] After half an hour or less on the way, we came down to a river with much green vegetation, but without water. It was in a most beautiful plain of rich soil, a quarter of a league wide, and more than 2 leagues long. After that the mountains come close together; following the dry riverbed between them, we arrived at a stopping place with running water and good pasture....

The diarists' descriptions of the two travel days, 3 and 4 April, conform well with the route here mapped; indeed, Crespi's "almost the entire march was made along the skirts of a high mountain range" would fit no other trail in this area. But, of the two camps, only the second, 4-5 April, can be securely located, from both diarist's accounts and from the survival of the name, San Isidoro,

given to it by Fray Juan Crespí. Our confidence in that identification allowed us to place the intermediate camp, 3 April, on the basis of times and distances reported for the two travel days.

4-5 April: San Isidoro (C), 30°46.2' N, 115°33.1' W, 2,950 ft., H11B55.

[Cañizares:] At 10 a.m. we set out from this camp and took a route to the NW by W. In spite of the many windings which the narrowness of the arroyo made us take, the trail by which we left was still very rocky. About half past twelve we climbed a hill from which we saw a very beautiful valley. We reached it at 2:30 p.m. and pitched camp.... From San Ricardo to this valley of San Ysidoro it is 4 leagues. This valley runs from NW to SE.... There are many willow, sycamore, and cottonwood trees.... Two small rivers rise in the nearby Sierra Madre which branch out from the two sides of the valley and join in the middle. [4 leagues -3.0.]

[April 5] Six soldiers went out to scout the land and look for a water hole for the next days' journey. They returned at sunset and reported that this valley, where we were, extended for more than 4 leagues, with a water supply all the way. They had seen a fair-sized river....

[Crespí:] We set out a 10 a.m. ... taking up a course WNW, we went on through the mountains, up and down grades of pure soil having only a few rocks in some spots ... the entire day's march, which was 4¾ hours over very broken country, during which we must have made 4 leagues. [At the end] we came down to a very handsome level area, at the foot of a high range, with a great deal of very good soil, all of it covered with large grasses, and a handsome stream with a good flow of water running through the flat at ground level.... [4 leagues -- 3.0.]

[Serra; 29-30 May:] We set out and our march lasted 3 full hours, but it was hard going, all steep grades, up and down; the hills of loose soil, but steep and difficult. Finally we came down to the plain, and all our trouble was well rewarded by the beauty of the spot, without equal among all that we had seen so far.

See 3 April for our placement of trail and this day's campsite.

6-7 April: Arroyo del Caballo, 30°47.4' N, 115°37.7' W, 1,770 ft., H11B55.

[Cañizares:] At 8:15 a.m. we left camp, taking a route W by NW in order to get around a barranca in our path. We passed by it and entered the Arroyo de San Ysidoro, and at 12:30 p.m. we stopped and made camp in the same arroyo. All the way along this arroyo we traveled generally W, S and sometimes N because of the many turns which we had to make. There are some good plots of land which can be cultivated, the only defect being that the water is brackish and unpleasant to the taste. However, the stream becomes larger and runs more rapidly after two other little creeks flow into it. There are many oak, cottonwood and willow trees, and some mesquite. [3 leagues -- 3.0.]

[April 7] The captain left with six soldiers to scout for tomorrow. He returned with the news that he had seen a fair-sized river about 2 leagues away, and that the river wound around in the interior of the Sierra Madre.

[Crespí:] We set out at 8:15 a.m. ... taking a WNW course. We shortly came onto another stream among very rough hills; the course turned NW along a slope, at

the bottom of which could be seen another stream well lined with cottonwoods. We kept on through very rough, stony country, until, just before reaching here, we came into a hollow with a bit of a grassy flat through which another stream flows at ground level -- we guessed it to be the same one that waters San Isidoro. We set up camp upon an elevated little flat.... It was  $3\frac{1}{2}$  hours march and we must have made 3 leagues.... [3.0.]

[Serra; 31 May:] We started in a S direction since the lay of the land does not permit one to take any other way. To the N rises an immense wall of high mountains. After crossing some hills in depth about a quarter of a league, we traveled to the W, descending to a valley where, deep down, a river or gorge thickly covered with cottonwoods came in view. And thus we continued marching for 4 hours or more, the road sometimes dipping down to cottonwood groves; then we would climb up once again to the top of the hill. After 2 hours on the way, the canyon broadens out into a fair-sized plain, covered with good forage.

The diarists' descriptions agree, but that of Cañizares is the most explicit and well depicts the route we have mapped. Actually, the initial detour to avoid a steep, rocky defile in the main arroyo is not easy to find, and that makes Cañizares's note from the previous day the more enlightening, "Six soldiers went out to scout the land...." Their expertise no doubt accounts for the efficient descent of Cañada del Conejo to rejoin Arroyo de San Isidoro just below the problem *barranca* noted by Cañizares.

8-9 April: Arroyo de San Antonio, 30°48.9' N, 115°41.5' W, 1,440 ft., H11B54.

Cañizares: We set out at 8 a.m. from the arroyo which runs down from San Ysidoro. We took a NNW route and, having traveled about 1 league, we came upon the river ... this one, besides being of fair size and turbulent, races down with great speed from its source in the Sierra Madre. There are plenty of oaks, willows, sycamores and live oaks, but what the place lacks most is arable land, for the steam is so completely enclosed and surrounded by hills that there is not room for its waters to spread out when they reach the foothills. In the 2 leagues which we traveled along it, we had to cross it 13 times, and in places its width must be 2, 3, 8, or even 10 yards. It divides into several branches, and in them the water runs just as rapidly. As soon as we came to this river we turned W by NW, and at 12:15 we camped at the edge of the river. [3 leagues -- 2.2.]

[April 9] At 10 a.m. the scouts returned and reported that the river narrowed and the going became difficult. They had seen an arroyo where we could camp, but it would be necessary to cut a trail. The captain decided not to leave until the next morning.

[Crespí:] We set out at 8 a.m. on our way to the watering place the scouts found yeaterday. We took a NNW course, and on going about <sup>3</sup>/<sub>4</sub> or a full league we debouched onto a full-flowing stream or river ... that has a good deal of depth and water in it; it flows in a deep course and is so overgrown with cottonwoods, willows and other trees ... that it was necessary to cut down trees in order to cross it -- as we were forced to do as many as nine times. The river runs between steep slopes with no soil on its margins ... one must, in order to traverse it, zigzag along the few negotiable slopes afforded by its sides. Our course turned WSW on

coming onto the river here, as its course comes from ESE toward this direction, among very high, rough mountains. 4½ hours' march; we must have made 3 leagues. [2.2.]

[April 9] ... scouts who went down river reported it narrowed markedly farther down and there was a waterfall; to leave here it will be necessary to open a way through a gap in the mountains, which they decided to do early tomorrow morning....

[Serra; 1 June]: We resumed our journey which lasted 3 hours, or a little more; first, 2 hours along the Arroyo de Santa Petronila; later it disappeared gradually, the two lines of hills closing in together. Soon afterwards we saw the source of a brook of fair width, with cottonwoods, willows and other trees in such numbers that they were growing not only on the banks but also in the bed of the river. Having to cross it from one bank to the other at least eight or nine times, our greatest difficulty was to find a way between the trees. For more than an hour we marched along the river with very high mountains on both sides. Not one piece of level land is to be found here that might be irrigated.

The route for this day simply continued down the same arroyo, the continuation of San Isidoro, which today becomes Arroyo de San Antonio below the point where the two join (very close to the 6-7 April campsite). Both diarists report large amounts of water in the arroyo and much travail in making the necessary crossings, nine according to Crespí, 13 reported by Cañizares. It is important to remember that southern mules, not accustomed to running water or even large pools, are always reluctant to wade across and must be led or driven across, often with boisterous difficulty. No doubt such delays accounted for the diarists' gross overestimation of their progress on both 6 and 8 April, reporting three leagues each day in place of the actual two.

Note Crespi's entry, above, for 9 April. The scouts he mentioned did an impressive amount of reconnoitering in less than a full day, as will be seen in the notes for 10 April, below.

10 April: Arroyo de Valladares, 30°50.3' N, 115°43.8' W, 2,160 ft., H11B54.

[Cañizares:] The captain left in the morning with eight soldiers to open a trail, and at 9 a.m. we started out toward the W and then swung N. After traveling about 1 league we came to the foot of a hill where we had to stop to give the soldiers time to finish the trail, which they were opening with a great deal of difficulty. At 11 a.m. we climbed the hill and saw a stream in which there was plenty of water. We reached it at 1 p.m., and pitched camp. At 4 p.m. the captain went out with six soldiers and returned at 6 p.m., reporting that the terrain was beginning to open out ... from San Dionisio to here is 3 leagues. [1.5.]

[Crespí:] We set out at 9 a.m., keeping along the river course to WSW. We must have gone <sup>3</sup>/<sub>4</sub> league ... crossing it from one side to the other three times; it widens out into a sandbar below with no longer such a quantity of cottonwoods. A gap opens in the mountains, close to the falls, where they [soldiers] prepared an extremely steep grade, early this morning, up which we are to climb. There is a spacious flat area here at this gap which, by bringing the river's water to it, seemingly could be used for a mission. It appears that water could be brought in from two different sources, one being the river at the point where we left it, and the other on the opposite side of the same flat where it makes a bend farther up.

Past the latter place, we began to climb the extremely high grade just prepared, but on climbing to the top of it, there were other, higher ones beyond.... After so far a climb, we found ourselves descending once more to the foot of the range where we could see a stream, very lush and green, having a good flow of running water.... It was  $3\frac{1}{2}$  hours' march and we must have made 2 leagues. [1.5.]

[Portolá; 2-3 June:] ... we proceeded for  $3\frac{1}{2}$  hours over very steep hills; on one of these the captain [Rivera] had cleared a path. We halted in a gully where there was sufficient water and pasture.

[Serra; 2-3 June:] We continued the march, one of 3½ hours. ¾ [of an hour] was along the same river, which here spreads out in a sandy beach with fewer cottonwoods, but some are still seen, and the water continues running. Leaving the river at our backs, we entered a spacious plain that has all the appearance of being able to support a mission, when irrigated by the river. After crossing the said plain, we began to climb hills. After we passed a high mountain, another stood right in our way. We climbed up its slopes, hoping that from the summit we might be able to catch a glimpse of the ocean of the west coast, only to be disappointed. From that eminence we saw that beyond a shallow valley, and medium-sized hills, there came a further chain of mountains just as high as those we had passed. So after so much climbing we found ourselves in a new piedmont or foothills.

The key to re-locating the 1769ers pass out of Arroyo de San Antonio (and a key as well to locating the previous night's camp) lies in Crespí's words, beginning "There is a spacious flat area here at this gap...." In our reconnaissance of the entire arroyo above this point and several miles below, we noted this as the only reasonably flat area large enough to merit Crespi's description (echoed by Serra, you will note). Moreover, our subsequent fieldwork showed the existence of well-used cattle trails up out of that flat area and over a pass northwest of it; the approach to that pass is indeed high and steep, as described first by the scouts who had gone out on 8 April and then by the diarists. Indeed, this would be the only place on the entire journey where most of the soldiers had to pitch in and build or clear trail, using iron bars where necessary. The cuesta, or hillside trail, thus opened would be the highest (over 1,000 ft.) and steepest of the entire journey. Crespí witnessed neither the scouts nor the trail builders at work, but he was moved to an unusual degree by their accomplishment and by the formidable obstacle presented by even the best possible transition northward from Arroyo de San Antonio to Arroyo de Valladares: "We began to climb the extremely high grade they had just prepared, but on climbing to the top of it, there were other higher ones beyond ... and after so high a climb, we found ourselves descending once more to the foot of the range where we could see a stream, very lush and green..." All in all, an apt picture of the route we have mapped. The campsite for that day saw the death of Manuel Valladares, whose name the arroyo and nearby ranch retain to this day.

11 April: Valle Guatal de los Encinos, 30°50.7' N, 115°49.3' W, 1,450 ft., H11B54.

[Cañizares:] ... at 1:15 p.m. we set out toward the NW and then swung to the W. We crossed a hill, and, entering a level stretch of country, we continued our W by NW course. At 5:30 p.m., we climbed a hill on which we camped because there was a little water hole nearby. We traveled 3½ leagues to reach this campsite.

# [2.7.]

[Crespí:] We set out at 1 p.m. ... course NW; on going a short way up hill and down through ravines, it turned SW, and we came out of the ravines into a dry creek along which we came into a large plain and afterward topped a tableland, and the way turned once more to WSW. On going about 4 hours or a bit more, we went up a high knoll where there was some forage but nothing more than a small pool of water at a small stream close by, only enough water for the people ... this day's march must have been 4 leagues' worth ... the country continued barren and with very little forage.... [2.7.]

[Serra; 4 June:] ... our march in the afternoon lasted  $3\frac{1}{2}$  hours. At first, for about half an hour, we were crossing gullies -- up and down; then came flat country for most of the time till at length we came to our camping ground on a large tableland, as barren as could be, with neither food nor drink on it. It is more than a league long and has scarcely a bush -- the flats and hills around are full of them....

The route described in 1769 conforms as closely as could be imagined with that mapped here: the hills crossed through, the plain entered (Valle Guatal de los Encinos) and the camp on a hill.

12 April: name unknown, 30°49.2' N, 115°52.8' W, 1,180 ft., H11B54.

[Cañizares:] At 6:30 a.m. we left this camp to look for water, following a SW route, for the many gullies along it gave us hope that we might find some. At 11:30 a.m. we stopped on a mesa, and six soldiers went out to look for water. They returned and reported that they had found some, but that it was necessary to dig a water hole. The road we followed to get to this campsite ran through wide plains, and we must have traveled about 3 leagues. [1.7]

[Crespí:] At 7 a.m. we set out on a course SW ... and came onto a very spacious tableland or plain within the range. Beyond, we came into very low sloping hills out from the mountains, in no wise difficult going, but grassless and treeless entirely ... nor did we come upon any sign of water. It was a 2 hour march and we must have made 2 leagues. The scouts set out in search for water and soon returned well pleased, as now the seashore lay nearby, and very close to the shore they had come upon running water about 1 league from where we were. [2 leagues -- 1.7.]

Crespí's implication here of a nearby seashore had to have been based on a misinterpretation of a scout's reported sighting of the sea from a lookout point that must have been 9 m., or well over 3 leagues, away from the nearest beach.

[Serra; 5 June:] We started in the direction of the SW, veering to S, looking more to find water and [animal] feed than to push ahead with our march. The march did not last more than 2 hours. We had sent ahead for a water hole to be dug about a league and a half from the camping place.... Most of the journey was through the tableland which we had entered the night before; the rest was over hills easy to cross.

The low hills and open dales of this area would permit choices of routes and campsites. Our decisions were based on the statement that they camped on a mesa and that water for the animals

was found 1 league away, presumably the Arroyo de los Alisos -- only a half league to the west, but this error could have arisen from a careless estimate on the part of those who had to drive 188 animals over to water and back, a chore that might well make the distance seem greater.

13 April: Arroyo de San Telmo, 30°56.4' N, 115°56.4' W, 525 ft., H11B54.

[Cañizares:] At 9:45 a.m. we set out from camp, taking a NNW route. Traveling at the pace of the pack animals, we arrived at two o'clock at a wide valley, but there was no water. The entire road we traveled passed through hills near the [Pacific] coast. We made camp half way through the valley, and the scouts went out to see if they could find water at the northern end. They returned at sunset without having found water, and with the news that they had gone more than 2 leagues in that direction. I estimate that it was 4 leagues from the last camp to this one. [4 leagues -- 3.7.]

[Crespí:] We set out at 9:45 a.m., course NNW, and so went over very easily traveled lines of knolls lying out from the range. The country continues barren and treeless .... On going about 2 leagues or a bit over, we began to meet with a great plenty of mescals.... On going 4½ hours in which we made 4 leagues, we came down to a very large valley ... no water however having been encountered. We made camp on the east of this handsome valley, at the beginning of it. Scouts came back having found a large pool of fresh water at the west end of this plain. [4 leagues -- 3.7.]

The northern half of the straightforward route we have mapped is still in use as an ungraded auto road, and all works well with the laconic diary entries.

14-15 April: San Telmo, 30°58.8' N, 116°04.9' W, 330 ft., H11B53.

[Cañizares:] ... the scouts went out to see if they could find water at the western end of this valley; [they] returned to see if the captain wanted us to go to a water hole they had found. He decided to do so. We left at 4:30 p.m., going SW by W. Night fell before we reached the water hole, and we traveled until nine in the evening, when we came to the place of which the scouts had spoken; probably 4 leagues from the last camp to this one.

[April 15] I examined the watering place, which was a very large pool stretching from NW to SE. Its depth appeared to me to be about 24 codos, and there were turtles and whitefish in it. There is a great deal of alkali on the banks of the pool.... In the afternoon the captain set out to explore the country ... he [later] told me that in this valley, which wound its way toward the west coast, there was an abundance of water.... From the top of a high hill he had seen the ocean, and it appeared to him that near the valley there was an opening. [4 leagues -- 3.8.]

[Crespí:] We set out from this spot at 4:30 p.m., going east to west across the large valley and plain.... At where we were upon the east side, it may extend a league, or so the soldiers report.... The plain must be ½ league in width at least, and not under 5 or 6 leagues long from east to west. [After] a 4½ hour journey in which we must have made at least 4 leagues over country as flat as the palm of your hand, we reached, at 9 p.m., the pool lying at the west end of the plain. The pool lies where we stopped at the end of the plain's end, at a narrow gap in the

hills upon the west. [4 leagues -- 3.8.]

[Portolá 6-8 June:] ... we proceeded for 6½ hours; there were many agaves along the road. We halted at a very large pool of water -- a most beautiful place to pasture many animals, possibly for the entire year -- where there was much good land for sowing.

[Serra 6-8 June:] ... the day's march lasted exactly 6¼ hours. Half an hour after starting, on climbing up a hill, we saw that the one right in front of us was thickly covered with fat mescals ... the road, was good, and almost entirely level.... This district is broad and spacious, and has more than a league of very fine pasture -- there are some swamps with reeds growing in the water. At one end of it where we made our camp, there is a pond of clear water, sweet and soft -- it must be 150 yards long, and certainly 20 yards wide. It is so deep on both sides and at the far end that, as soon as you step into the water, you are out of your depth. ... on the western side of the pond there is another stretch of land into which the pond overflows, spreading out and covering enough territory to sow 6 fanegas of seed.

This is one of the simplest days to map, a ride westward along the bed of Arroyo de San Telmo to stop at a pool near the great loop in the arroyo's path.

16 April: Arroyo de San Rafael (C), 31°05.8' N, 116°05.2' W, 330 ft., H11B43.

[Cañizares:] ... at 8:30 a.m. we left, going to the NNW, which was possible because the terrain opened out on the tops of the hills. At 1:30 p.m. we arrived at another very well-pastured valley where there was some alkali. It was seen that the opening of this valley ran toward the shore. We saw a pool of fresh water and, a little farther down, a small stream ran along the surface of the ground for about 50 yards, then disappeared. Today we traveled N and NE about 3 leagues to reach this valley. [3.7.]

[Crespí:] We set out at 8:30 a.m., course northward; shortly it turned NNE, then back once more to N. A journey of 4½ hours, in which we must have gone 3 leagues, was almost continually upon this northward course ... and we came upon the aforesaid course to a very green, lush valley all surrounded by hills.... This valley must be over a league long and over ¼ league wide. Through a little gap in the range upon the NNW of the valley here, one comes onto another level no wise inferior to this one in greenness or in breadth. [3 leagues -- 3.7.]

[Serra; 9 June:] ... the day's march lasted 4¼ hours ... straight north, from which we had been forced to diverge on the previous days. Today's stopping place seems better than yesterday's, since it is a valley in a circle of mountains, all covered with green, in length more than a league, in width more than ¼ of a league. The side facing the west coast has plenty of cottonwoods, sycamores and other trees. To the NW by a little gorge you enter another plain inferior in no way to this, neither in green vegetation nor in size.

We have mapped the logical pack train route (its northern half long in use as a wheel-track auto road) from San Telmo to the village of San Rafael de Abajo, a name obviously resulting from the adoption of Crespí's original choice, long since extended to this entire agricultural arroyo.

17 April: Cañón el Saladito, 31°14.1' N, 116°07.7' W, 400 ft., H11B33.

[Cañizares:] At 8 a.m. we left this valley and took a NNW route, swinging sometimes to the N and at other times NW. At 1:30 p.m. we came to a well-pastured valley with much alkali ... in it we found, on a hillside, a watering place which ran down from a pool of water that had the taste of bitter almonds and the tartness of alkali. A little farther down there was a marsh where the water was not quite so bad. This valley and the two which we passed run from NE to SW. The two wooded arroyos that we saw along the road to this place [had] shrubbery that, in the distance, appeared to be well watered, but they were very narrow and closed in. From San Raphael to this place it is 5 leagues. [4.7.]

[Crespí:] We set out at 8 a.m., course northward; the course on going a short way turned NNW, and again N before the end of the day's march: a journey of 5½ hours, all over level land still continuing barren.... We must have made 5 leagues, and came to another valley where there is a very green plain running from NE to SW. By what I saw walking in the vicinity of the camp, the whole level seemingly is full of nitre and saltpeter. [5 leagues -- 4.7.]

[Serra; 10 June:] We set out about 2 p.m., and the day's march lasted a good 5 hours, all over high mountains, steep climbing and much descending -- nothing on the flat. ... today we stopped at a river of fair size, with pasture and water. Most of the ground here is sandy and the water although drinkable tastes quite brackish.

Fortunately, in addition to both diarists' descriptions of salty water and salt deposits -- hereabouts uniquely found in Cañón el Saladito and in Arroyo el Salado below their confluence -- Cañizares also detailed the twists and turns of the day's march, perfectly matching the terrain here mapped.

18 April: Arroyo de San Vicente, 31°20.5' N, 116°15.0' W, 330 ft., H11B33.

[Cañizares:] At 8 a.m. we set out from this camp and went NNW, but, not being able to follow this route because of the hills, we turned to the NW through a wide plain which extended in that direction. At 12 noon we came to another place, well wooded and with water in a marsh ... the view is extensive, and the valley covers such a large area that it seems [likely] that one could find water either at the beginning or the end of it because ... the soil shows no evidence of alkali. [4 leagues -- 5.1.]

[Crespí:] We set out at 8 a.m. on a NNW course. It turned NW after a short way. The country opened out during our journey with plains and rolling knolls that were very easy going. On going a full 4 hours in which we must have made 4 leagues as well, we came to another plain, a fairly large one, of moist soil or swampland.... The plain here runs NE to SW. Not a bit of nitre as at the last camp has been noted. It lies at the foot of mountains. [4 leagues -- 5.1.]

Another very obvious day's march simply selecting the best route in the broad valley. The campsite is far less obvious, but the descriptions of the following day's journey show that this camp was in the west end of the San Vicente valley (and thus the party had to begin climbing hills almost immediately as they left).

19 April: near Las Codornices, 31°25.4' N, 116°26.0' W, 790 ft., H11B32.

[Cañizares:] At 8 a.m. we set out, traveling to the NW, then angling to the W.

After following this route through mountainous country for about 3 leagues, we came upon a valley that seemed to be good [probably the arroyo just south of present-day Rancho Las Cruces], although it was a disappointment ... we found no water. At 1:30 p.m. we came to another valley well-covered with trees, much pasture, but lacking water. The slight information we had of this valley forced us to make camp, and the scouts went out with the captain to look for a watering place where the animals might drink. They reported having found only a little pool from which it would be very difficult for us to drink. This valley was very much closed in and surrounded by hills.... The barrenness of the land continued. To reach this camp we traveled 5 leagues over a rough trail. [5 leagues -- 5.5.]

[Crespí:] We set out at 8 a.m., course NW veering toward W; it continued so during the entire journey, 5½ hours of fairly hard going because of various ups and downs at ravines. On going 5 leagues we came to a stream with many sycamores and much grass ... but no water was found. [5 leagues -- 5.5.]

[Serra; 12 June:] We continued our journey, 4 hours of hard going -- nothing but ravines, steep climbing and sharp descents. For that reason today we have traveled mostly toward the west, hoping to reach the sea, but it continues to escape us. Midway in today's march we passed a rivulet with green trees and very high sycamores, but without water. And finally, from a summit we saw another arroyo even greener -- the trees we took for cottonwoods. Our halting place is on some rising land near the river ....

Our fieldwork between the town of San Vicente and Valle de Santo Tomás (the terrain covered by the 1769ers during 19 April to 22 April) was vital, because inspection of our maps alone left many apparent choices of routes. However, surveillance of the ground and discussion with longtime residents resulted in establishing a highly probable match between the diaries and the route NNE on 21 April. With that established, we had little problem placing the camp for the night of 20 April, described as close to the sea ("¼ league," guessed Crespí, but it must have been closer to ½ league, as shown by us). Working backward again, the campsite for 19 April seemed obvious, working well both in terms of the diarists' estimated distances, and their descriptions of the terrain covered on 20 April. When those points had been established, we found that we could work backward to San Vicente, and that both the ground and the distance fitted more than adequately with the historic accounts.

20 April: name unknown, 31°26.5' N, 116°30.0' W, 400 ft., H11B32.

[Cañizares:] At 7:30 a.m. we set out ... NW along the rim of the hills. We traveled about 2 leagues in the above direction, and, not being able to go any farther, we turned to the W. We saw the ocean very close to us and the crest of a hill toward the WNW, at whose foot lay the waters of the sea. In a valley we found two little pools of water, and we had to stop because everyone was in great need of it. The captain ordered all the scouts to find water and a road where the valley opens out. They returned at sunset and reported having found both, but that the water was 3 leagues distant. We camped at noon because we were in danger of dying of thirst. We must have traveled 2 leagues along the sierra and road. [2 leagues -- 1.9.]

[Crespí:] We set out at 7:30 a.m. taking the previous day's NW course. At first the

way went by a great many ravines and middling sized hills, but we came down to a hollow where there was good grass and a small well made by heathens. [Soldiers] found a good-sized flowing spring under some trees not far down the hollow. It was about a 2½ hour's march and we must have made 2 leagues. After our first hour's travel, upon going up the last hill before coming down to this [campsite], we stood for a while at the top looking at the Pacific, about ¼ league away, and intended to go down and follow its shore. But seeing it so cliffy as to afford no way along, and with the mountains so high and dry ... we took our way to the aforesaid hollow.... [2 leagues -- 1.9.]

See the explanation advanced under 19 April, above.

21 April: Cañada el Agua, 31°32.0' N, 116°28.2' W, 1,180 ft., H11B22.

[Cañizares:] At 6:30 a.m. we set out NW and in a short time turned NNW, for we had entered the arroyo where the water had been found. At 10:30 a.m. we stopped in this arroyo.... The soldiers who came with the pack animals told us that near the camp from which we had come there was running water, and the reason we had not seen it was that it was covered with grass. [3 leagues -- 3.1.]

[Crespí:] We set out at 6:30 a.m. [following] a N course. Shortly, we came onto another stream, and both this and the one we departed have many very lush sycamores, and very good grass. It was a 3 hours' march and we must have made 3 leagues. [3.1.]

[Serra; 14 June]: After a march of 2 hours we arrived at the first watering place. The road went through a succession of canyons and hills, all of pure soil as are all the mountains we saw today in all directions, their number beyond counting. This place has not only water but also plenty of fine pasture, and, dotted with shade trees, [and has] room for a good farm....

See the explanation advanced under 19 April, above.

22 April: Valle de Santo Tomás, 31°34.2' N, 116°25.8' W, 400 ft., H11B22.

[Cañizares:] At 8 a.m. we set out toward the NE. In a short time we turned N, and having gone about 1½ leagues, we reached the valley which the captain had seen the day before. In the part we saw, which must have been about a league, we found two streams of water. One came out of the ground flowing for a little way, but after about 8 yards it disappeared. The larger rushed through a channel that came through the middle of the valley, running about 500 yards, and then disappearing into the ground. Another little arroyo joined this one, coming down from some tree-covered hills. We saw many willow, sycamore, cottonwood and live oak trees. We did not know if the eastern part of this valley had water since we had not examined it. We arrived at 10 a.m., and traveled 1½ leagues. [1.8.]

[Crespí:] We set out at 8 a.m., at first on a NNE course. Shortly, we turned N and came, on this course, through hollows and easily traveled slopes of pure soil, into view of a large and handsome valley. We faced a very high, steep grade to get down; down it we went, our animals becoming bogged in the bare soil, dry as it was. At the bottom, I stopped several times to look back at where we had come down and I crossed myself on seeing how lofty and vertical a grade it was. The

valley here must be over 2 leagues long N to S, and a width of not under ½ league. The soil is all good and grassy.

... we made camp about in the center of the length of this valley at the edge of a spring that comes out of a sort of cave high up ... there is another just as high a little over 100 paces distant.... We could see, to NE and E of where we were, two streams having trees on them, coming down out of the mountains....  $[1\frac{1}{2} \text{ leagues} - 1.8.]$ 

[Serra; 15-16 June:] We set out at 7:30 a.m. and after an hour's march arrived at the water hole we were aiming for.... To get down to this place there is an immensely long grade; in the rainy season it must be impassable. Even as it is, the animals get stuck in the dust, and founder around. This is a valley whose length from north to south, if measured with a cord, would, in my judgment, be much more than 2 leagues; the width is in proportion, at least ½ league. The soil is good throughout and fine for pasture. I noticed three springs which are very good. The first, where we are stopping, and about midway down the valley, is a spring from which the water rises with much force, even now during the driest season of the year....

The original location of Misión de Santo Tomás was near the mouth of Cañón de Chocolate, as reported in 1935 by Peveril Meigs, based on his inspection of ruins, and on local tradition. Meigs's sources had *el camino real*, as it came down into the valley, crossing El Chocolate, as may be seen in Meigs's map in *The Dominican Mission Frontier*. His route location (which we have used) works well with reported movements of the 1769 parties, particularly Crespí's account of the last steep grade as they dropped down to the valley floor. The camp location is indicated by both Crespí ("we made camp about in the center of the length of this valley") and Serra ("we are stopping ... about midway down the valley"), and their words become more specific when their overall descriptions of the area show that they were writing about the lower valley, the part that actually runs more east-to-west than the north-to-south they reported. This assumption is borne out by Cañizares's flat statement that no one in the party entered the eastern arm of the valley, the ultimate location of Misión de Santo Tomás and route for the highway. A further corroboration of the 22 April campsite is provided by Crespí's account of their departure the next day, "We set out at 8 a.m., course due N." The only feasible exit to the north is up the grade employed by the modern highway.

23-25 April: Cañón de la Grulla, 31°37.2' N, 116°26.7' W, 650 ft., H11B22.

[Cañizares:] At 8 a.m. we left this place, going NW by N. After traveling about 1½ leagues, we came to another valley where there was water in a marsh and a spring of warm water. This spring was entirely surrounded by live oaks and sycamores.... The captain went out with the scouts, and on his return he told me he had seen the ocean and a great bay and an island, which I assume to be La Ensenada de las Vírgenes, and that the sierra ran out to the edge of the sea. [1½ leagues -- 1.9.]

[Crespí:] We set out at 8 a.m., course due N. Upon starting to leave this plain, one goes up a grade and over a little pass, the first having a good deal of stone on it, and there is more farther on. It was all up and down, through live oak growth, by no means level yet not hard going either. We came, at a scant 2 hours, to another

spacious valley, over a league in length and in spots so green as to seem like so many cornfields. We must have made about  $1\frac{1}{2}$  leagues from the previous place. This valley runs from NE to SW; all of it is very good soil. Although a plain, the ground has a fall and there is a great amount of tule rush and willow patches running along the highest part ... [there is] a good-sized pool of hot water in the midst of this inviting growth; the water is very hot upon being first drawn out, however it turns fresh when left to air half an hour.... [ $1\frac{1}{2}$  leagues -- 1.9.]

We have mapped the only feasible route northward from Valle de Santo Tomás, and placed our campsite to match the diarists' descriptions and fit their shared estimate of distance.

26 April: Corral Viejo, 31°42.4' N, 116°24.2 W, 980 ft., H11B22.

[Cañizares:] At 10 a.m. we set out, going over some hills to the NE. After a bit we turned to the NNE, and, when we went down into the valley, we turned N. At 2:30 p.m. we came to an arroyo which ... runs to the WNW and is well covered with live oaks and sycamores, but it has little water for there are only some pools. There were two little hills covered with brush.... [3 leagues -- 3.9.]

[Crespí:] We set out a 10:30 a.m., taking a NNE course veering NE; we turned on going a short way, N veering NW. A 3½ hours' march and we must have made 3 leagues over hill after hill.... We came to the watering place [found by scouts], a stream where there is grass, some water, live oaks, sycamores, and unrecognized shrubs. [3 leagues -- 3.9.]

From 26 April to 1 May, the Rivera party was involved in its only serious misstep. Here in Cañón de la Grulla they had only to head northwest down the arroyo and it would have delivered them directly into the Ensenada basin at the site of present-day Maneadero. Instead, they chose to head northeast, against the logic of their general bearing to the northwest throughout their trek. None of the diaries suggests any hesitation about the route on which they embarked nor any inkling that they had scouted to the NW. By the second day, 27 April, Rivera knew they faced unusual difficulties in finding water and traversable terrain. The next day, scouts were sent out to find water and a route to the seashore, which they did, but nothing would be easy, and the party would make two short runs and two more camps before finally reaching the shore six days out of La Grulla. They could have arrived at the same spot in an easy three days had they realized they could go northwest. At La Grulla, they may have seen clear signs of Indian trails leading to the NNE, leading them to choose that route. (Mapping for the six days in question follows the research of Dr. Eduardo Mancillas noted in the introduction above.)

27-28 April: Cañada Rinconada, 31°45.3' N, 116°26.4' W, 1,300 ft., H11B12.

[Cañizares:] In the a.m. the scouts were ordered to see if they could find a road and water. They returned at 9 a.m. and reported that the country seemed to open out enough for travel, but that there was no hope of finding water because all the land was dry and barren. This made it necessary for us to carry water in water bags and barrels. At 11 o'clock in the morning we set out from the Arroyo de los Mártires toward the N, the captain and ten soldiers going ahead to see if they could find water. After traveling about 2 leagues they found themselves hemmed in by the sierra, and it was impossible to travel in any direction from 1° to 4° on the quadrant. This forced us to call a halt at 2 p.m. on a small plain which had no

water but was convenient for pitching camp. At this time the scouts left to see if they could cross the sierra. They returned at night and reported that they had not found a way because there were rugged hills everywhere which ended in *barrancas*, and this had kept them from descending a single hill. [2 leagues -- 2.3.]

[April 28] The scouts, and I in their company, set out to look for the sea and to note the island. The leader of the escort was to search for a water hole and a road. On arriving at the beach I saw an island which stood out in bold relief and must have been that of Todos Santos in the bay of the same name. We were very much confused because we had such an inaccurate map. We found a road, and, a league from here, a watering place ....

[Crespí:] We set out at 11 a.m., course due N, going uphill and down. On surmounting the first hill, we came to a stream -- another dry one -- having sycamores and live oaks. It was a 3 hour march in which we must have made 2 leagues, and we stopped, having found no water, at the foot of a line of very high mountains. [2 leagues -- 2.3.]

See comments offered under 26 April.

29-30 April; Cañada el Junquito, 31°44.2' N, 116°27.8' W, 1,250 ft., H11B22.

[Cañizares:] We set out for the water hole which lay to the WSW, and after traveling a league we stopped near it. We did not travel today because the mules were in great need of water.... [1 league -- 1.0.]

[Crespí:] We set out at early dawn and went about ½ league to a little spring that [the scouts] found yesterday; it is at a stream very lush with live oaks and sycamores and has a good deal of grass. [½ league -- 1.0.]

[Serra; 19 June:] We started very early. All the morning the way was up and down over mountains and down valleys, which has become a habit with us. After crossing the first ridge we ran into another arroyo full of live oaks, and some sycamores but short of water also, the general appearance being much the same as the spot where we slept last night. We traveled all the time today -- a matter of a little more than 3 hours -- seesawing between mountains and valleys, all dry, but dotted with trees. During the last stretch we turned southward to get to the watering place that the Sergeant sent us word about. This place very much resembles our previous stop, with the exception that it has water....

See comments offered under 26 April.

1 May: Valle el Maneadero, 31°45.4' N, 116°35.4' W, 50 ft., H11B12.

[Cañizares:] ... at 1p.m. we set out, toward the WSW to reach the seacoast. After traveling about 3 leagues we stopped near the sea and went down to the beach.... [3 leagues -- 3.3.]

[Crespí:] We set out ... taking a WSW course. It was about a 5 hour journey, uphill and down the whole way through ravines that were very hard going. After about an hour, from a prominence, we saw the long-wished-for sea and the bay. Now we came down toward the bay from the last crest and made camp in a low

spot that was already flat land and leading out to the shore, about a league short of the bay. We must have made 3 leagues. [3.3.]

See comments under 26 April.

2-3 May: Ensenada de los Todos Santos (C), 31°51.6' N, 116°37.3' W, 35 ft., H11B12.

[Cañizares:] At 6:30 a.m. we started out N by NW in search of the water hole. We reached it at 9:30 a.m., having traveled along the above route for 3 leagues over level land near the sea. We found that the water hole was good, abundant, and near the beach, and that it was close to a promontory which forms a roadstead protected from the northwest wind, a convenient place for a watering station. [3 leagues -- 3.1.]

[Crespí:] We set out at 6:30 a.m., taking our way to the NNW entirely over level land. On going about a league, we came to the shore of the great bay; we crossed a single ravine at half the way there, nothing to worry over. It was a full 3 hour march and we reached a corner formed by the first cove of the bay.... We set up camp on a little height about 200 yards from the water itself. It is a handsome spot, a beautiful plain of good soil covered with green grass out to the very edge of the sea water, and turning very lush along the edge that is next to the hills (which are not very high)....

[Portolá; 21-22 June:] ... we proceeded for 4 hours on a good road in sight of the ocean. We halted in a gully where there was much water and pasture. In this place we noticed that there were two islands; it is a large bay with the landmarks that Cabrera Bueno gives for the bay of Todos Santos.

[Serra; 21-22 June:] We pushed on following the direction of the shore from NE to SW. The road was all level, except for a deep ravine cutting right across our way, but it was not too bad. After 2½ hours of march, we arrived at the north horn of the said bay, and we pitched camp at a distance of a musket shot from the ocean. It is pleasant country, all good land, extending as far as the hills which are not very high.

Beasts bogging down in it. The valley [presented] a handsome spectacle: vast areas of green, a large stream of water flowing at the foot of the grade we were descending, and great numbers of large trees. When we finished the descent, we had to search for a way to cross a large swampy area of tules and bulrushes so as not to become mired in it. Across that, and about in the center of the valley floor -- close to the heathen village -- we made camp. It is about 2 leagues from the ocean ... 1 league from the previous camp. [Crespí describes a side canyon on the north side of the valley, thick with large trees and divided into several branches -- perhaps a good clue to their camp's exact location.] [1 league -- 0.5.]

[Serra; 25 June:] ... we started out along a very hilly road, most of the time in sight of the ocean. The day's march lasted  $3\frac{1}{2}$  hours. We finally arrived at the valley, where we stopped. But to get down to it we had a long and steep road. We were skidding rather than walking, with the ground all around so insecure that it was nothing but dust in which the animals got stuck. At last we got out of it and we made our halting place in the lower part of a green and leafy plain ... from an

enormous pool right in the middle a canal flows to the sea. You can see the ocean through an opening between the hills in front; the coast must be about 2 leagues away. On the north side is the beginning of a canyon which branches off according to the twists in the mountain range.

This brief ride, or more probably a hike on foot, took the group down the best available slope and across the marshy watercourse. Serra's report of seeing the ocean by looking west down the arroyo probably fixes the campsite at within the limited area in which that glimpse of the sea can be obtained. The diary accounts leave no doubt as to the logical route followed: over level land far enough from the shore to avoid marshy conditions. The campsite must have been at the base of the hill at the north end of the bay where the coast makes a 90° turn to the west.

4-6 May: San Miguel, 31°54.4' N, 116°43.8' W, 50 ft., H11B11.

[Cañizares:] ... at 9 a.m. we set out, to the NNW in search of the northern end of this bay. We reached it at 11 a.m., having traveled 3 leagues over level land. [3.5.]

[Crespí:] We took up our way at 9 a.m. to the NNW, going around a chain of hills forming the side-slope of the first embayment; we found ourselves in less than an hour's travel once more upon the very seashore along which we pursued the rest of our journey --  $3\frac{1}{2}$  hours in all -- all of it a good level way and hard soil, until we struck upon a hill terminating in the sea and having a very verdant low spot upon its skirt with several pools of good fresh water -- and here we set up our camp.

[Serra; 23 June]: We started from that place to reenter the line of mountains encircling this end of the bay, and in less than an hour's marching, we found ourselves again on the seashore. We followed it the rest of the way -- in all,  $3\frac{1}{2}$  hours -- all good, level road on hard ground until it meets with a mountain which abuts against the ocean itself. At its foot, in a hollow, is a very green meadow with numerous pools of water, sweet and good. There we halted for the night.

As the diarists noted, the party was compelled to head NNW from their campsite in order to avoid the impassible bluffs along the seashore (since removed by blasting in order to accommodate the present highway). After 1 mi., the hills forced them to turn west (down the gulch that now accommodates Calzada de José Clark Flores) and return to the shore. The remainder of the day's march simply followed the coastal shelf and terminated where they encountered another set of steep coastal bluffs beginning at Punta San Miguel.

7 May: Santa Rosa, 32°01.3' N, 116°46.6' W, 790 ft., H11D81.

[Cañizares:] ... at 7 a.m. we started out, taking a route N by NNW and then angling toward the W. After traveling about 4 leagues we saw an island in the sea which must be one of the Coronados. Continuing to the NW we went down into a very well-pastured valley.... Having arrived at 11:30 we pitched camp. [4 leagues -- 3.7]

[Crespí:] We set out at 7:30 a.m., leaving this bay by taking a N course on the way to the watering place found by the scouts. We traveled a very rocky stretch of stream bed and then at once undertook a very steep, rocky grade. At about a league's travel the sea again disclosed itself to us, close by to appearance; a long way off, however, had we attempted to approach it. We crossed a very lush

stream having sycamores and live oaks, but no water. At last, on going 4½ hours over a number of grades and knolls -- in which we must have made 4 leagues -- we came to a great valley, beautiful for its pasture and for trees at its ends, with a good stream of water flowing within a patch of tules, and with a pool of very good water. We made camp ... close to the aforesaid stream. At the spot whence we caught sight of the sea on this day's march we also saw an island that was not very far off, different from the aforesaid ones in the embayment, and this is, by what we saw afterward, already the four Los Coronados islands lying 6 leagues from San Diego harbor, appearing from afar as a single island but, as the histories tell, really four islands instead. [4 leagues -- 3.7.]

[Portolá; 24 June:] ... we traveled for about 5 hours; at the outset we had to climb a very large and steep hill, but the remainder of the road was good. We halted in a pleasant gully where there was much pasture and water.

[Serra; 24 June:] We ... started on our day's march -- 4½ hours today -- heading north, and turning our backs to the ocean as we set out. We marched first along a very rocky riverbed, then we soon climbed an exceedingly steep and rocky hill. After an hour's going we came in sight of the ocean again. It seemed near, but was at quite a distance should we have tried to get to it. We crossed a valley full of trees -- sycamores and live oaks -- but without water. Finally after crossing a number of ranges of hills, we arrived at an immense valley, with wonderful pasture, and, at its extremities, plenty of trees; there was a fair-sized river and lake of clear water.

The party began by entering the mouth of Arroyo del Carmen, but soon turned NW and climbed the west bank slope to reach the narrow mesa between the arroyo and the cliffs above the shoreline. Thereafter they headed largely N, always on the highest ground, until they reached the meandering Arroyo de Guadalupe at the point marked Santa Rosa on the CETENAL map. Cañizares and Crespí's reports of the party's first glimpse of the Coronados Islands is significant in establishing their route and campsites: this is the first place on any feasible route that could be suggested where the Coronados, distant 42 mi., could be readily seen, and would indeed appear as one, as Crespí reasoned.

8 May: name unknown, 32°05.2' N, 116°48.4' W, 720 ft., H11D81.

[Cañizares:] At 7:30 a.m. we left this camp, going WNW. After traveling about 2½ leagues we discovered at four o'clock, an arroyo which emptied into the sea and from which there was no way to descend to where we wanted to go. We had to retrace our steps and stop nearby in order to look for a way down the next day. From this height we had a beautiful view; all along the road we had traveled, through rolling hills well covered with pasture. [2½ leagues -- 2.2.]

[Crespí:] We set out at 7:30 a.m., course WNW. It must have been a  $3\frac{1}{2}$  hour march, in which we made 2 leagues, at the end of which we came to a verdant valley with a vast amount of water, so deep and cliff-lined, however, that there was no telling how to get down to it. It was 3 p.m. already and we were on a spacious tableland at the edge of the sea. We camped here while waiting for scouts to look for a way to go down. [2 leagues -- 2.2.]

The 1769ers encountered no obstacle during their first 2 leagues (5 mi.), moving on a broad mesa (actually more NW than the WNW they reported). But then they encountered the steep south bank of Arroyo de Guadalupe, now making its way directly for the seashore. They worked their way back to the east, along the edge of the mesa and, finding the bank still too steep, camped on the heights. (The Portolá party did not camp at this site.)

9 May: Arroyo de Guadalupe, 32°06.2' N, 116°48.4' W, 65 ft., H11D81.

[Cañizares:] In the a.m. we went down to the above-mentioned [on May 8] arroyo.... Water was found in a well-filled pool, and there were many trees on very moist and fertile lands around it. [1 league -- 0.5.]

[Crespí:] We set out at early dawn, keeping on yesterday's WNW course. On going a short way, we came in sight of yesterday's deep, green valley. We started down an extremely long and very steep grade; the pace was more like sliding than anything else, in sheer dust all the way....

10 May: Arroyo el Descanso, 32°12.2' N, 116°54.3' W, 15 ft., H11D81.

[Cañizares:] In the a.m. we started out, taking a NNW route and then turned WNW.... 2 p.m., we came to a valley very close to the seashore where our native companions showed us the watering place. [4 leagues -- 4.0.]

[Crespí:] We set out early in the morning, keeping on a NNW course, veering a bit NW, through a hollow having a great deal of trees. From here, we at once went up a very high grade beyond which wide-stretching, grassy tablelands continued before us ... over which we pursued our course, as well as over high ranges of knolls. There were high mountains a little distance away on our right.... On going about 5 hours in which we must have made 4 leagues, we viewed another deep, lush valley lying next to the sea. The place we were to get down was a fearsome sight, being straight up and down, but there was no use seeking elsewhere as it was all equally precipitous. All of us dismounted and, partly walking, partly skidding, falling and getting up again, we came down into the valley, a lush spot on a bold coast, next to the sea, but the waves break gently because of a partial embayment protecting the shore. [Describes the lower valley as a maze of vegetation, pools, etc.] [4 leagues -- 4.0.]

[Serra; 26 June:] We pushed on, and the first thing we encountered was a very steep grade. After that came long stretches of flat lands but at such a height that all the highest ranges in every direction -- as far as the eye could see -- seemed to be lower than we were. In front stand mountain sides, stiff climbs, ravines. At the end of 5 hours -- our stint for today -- we could see that we had to make a drop so sheer and steep that just to look at it made you shiver. Everyone had to dismount. And so between walking, sliding, skidding, falling and getting up again, we got down to a valley no less luxuriant than where we stopped last night. It is near the ocean on an extremely rugged coast, although a little farther up on the shore there is a kind of bay where the waves come and break gently ... we examined ... the vicinity of the ocean, where there are great pools of water, some with salt, others with brackish, and others again with sweet and good water.

The diaries attest that the expedition members began their trek for the day by heading N into the

mouth of Cañada de los Alisos and then, very soon, heading NW up the best available slope to reach another mesa like the one on the south side of Arroyo de Guadalupe. And again, they came to an end of the mesa to find a precipitous drop-off, this time to Arroyo del Descanso. After a trying scramble down, they camped behind the beach at the mouth of the arroyo.

11 May: Arroyo del Rosarito, 32°20.0' N, 117°03.0' W, 15 ft., I11C79.

[Cañizares:] In the a.m. we set out NNW along the seashore, left the coast, and continued through some rolling hills. About 4 p.m. we saw two islands, one of them being the same that we saw on the 7th. At five o'clock we stopped in another valley which runs down to the seashore and is very well covered with trees, and has a pool of water. [4 leagues -- 5.4.]

[Crespí:] We set out in the morning, taking up yesterday's NNW course, veering a bit NW.... On setting out, we at once came to the seashore and crossed large sand dunes. Most of the way during the day's journey was along the shore, all of it level ground but very full of gullies or gorges in bare soil.... Along the coast, at about a league or less from our previous camp, we encountered another green valley, also ending upon the sea on a calm coast. A large inlet, brimful with water, runs through the midst of it down till next to the sea.... In sight of the shore, we came onto more quite grassy tablelands having a great many mescal plants.... A 5½ hour march, and we must have made 4 leagues, brought us to a small valley having a good-sized stream in its midst with a good deal of willows. There is the usual naturally watered soil and pools of very good fresh water. The spot lies close to the seashore, with a good-sized pool of fresh flowing water about 100 paces from the sea water.... [4 leagues -- 5.4.]

[Serra; 26 June:] I am writing down here what we actually saw the next day [27 June], that at a distance of less than a league, along the coast, there is another green valley which extends to the ocean gently sloping to the beach. In the middle of it a large estuary flows down, the waters meeting at sea level.

Crespí and Serra, always mindful of potential mission sites, or even mission farms, both noted the "green valley" passed about a league into this day's march, important because it provides strong evidence for locating the previous night's camp at Arroyo del Descanso, since that watercourse lies just about a league south of the arroyo leading to El Médano and these are the only two such valleys in the area. Crespí's characterization of the day's march "most of the way was along the shore" must not be taken too literally. "Along the shore" may well have meant "within sight of the shore" or "near the shore" because, beginning at Punta el Descanso, the way N along the shore would have been difficult. Cañizares's words "we set out along the seashore, left the coast, and continued through some rolling hills" better fit the terrain, and hence dictated our choice of a route. And for lack of any other reasonable candidate, there is no doubt that Arroyo del Rosarito was the "small valley having a good-sized stream in its midst," the site of that night's camp.

12 May: name unknown, 32°28.9' N, 117°07.1' W, 80 ft., I11C79.

[Cañizares:] We set out at 8 a.m. toward the NNW. When we had traveled about 2 leagues, we saw that we would have to stop because of the great body of Indians in front of us. We made camp near the seashore and recognized the islands, which

we had seen from a distance, to be the Coronados. [2 leagues -- 4.5.]

[Crespí:] We set out in the morning ... following a N course veering a bit NNW, along the shore... It was a march of a bit over 3 hours, over country that was all very easy going, crossing some gorges though not such difficult ones as those before. We must have made 3 leagues and came to a heathen village on a tableland that looks to be an island, as it is surrounded by a gorge wherever not laved by the sea. The heathens tried to have us stop close to their village on the aforesaid tableland. We thought it better to cross to another one on the other side of the gorge, where there was grass at the edge of the sea. [3 leagues -- 4.5.]

This entire march was no doubt along the gentle slopes leading down to the beach, slopes cut here and there by the erosion gullies that elicited Crespí's reference to "crossing some gorges." And we are indebted to Fray Juan as well for locating their camp for the night on the north side of "a tableland that looks to be an island," a description that fits the unique detached bit of the coastal shelf upon which we based our location for that night's camp. We have no explanation for the large discrepancy in distances between our indicated campsites and the estimates made by the diarists (one of which is already 50% larger than the other). Nevertheless, the logic of the steps leading to this point and for the two days that follow convinces us that our placement is correct and that the low figures offered by the pilot and the priest might have been due to a combination of easy ground to cover and the imminence of San Diego, signaled by the presence of the Coronados Islands, and possibly by word from the scouts who always rode ahead.

13 May: Goat Canyon, 32°32.4' N, 117°06.2' W, 65 ft., I11C69.

[Cañizares:] In the morning we set out along the edge of the beach. After traveling about 1 league, I saw the rocky point above the port of San Diego, at a distance of 6 or 7 leagues. We followed the shore and discovered a bay which extended more than 5 leagues inland. We followed along it, going northwest, but having found a running stream, we stopped to water the animals. [1½ leagues --1.9.]

[Crespí:] We set out in the morning ... course due N. We had shortly to descend a very steep slope to a stream that was very deep down, but once having got down, we commenced climbing up over a large pass for the reason that the way which we had been following along the shore was cut off by the land's turning very cliffy along the seashore. On going about a league, we won past a point of land that had hindered us from seeing in what direction the sea ran onward; and there, for a vast distance along, was revealed to us the plain that we were to follow along the shore. We made our [way], from a small rise, the sea reaching far inland, and there we caught sight of the ships' mainmasts.

On going for about 3 hours, we arrived ... at a handsome stream running with a good-sized flow of water.... The stream flows at the foot of the range that we have had on our right during the whole day's march, and that draws back here for a bit over a league....

Goat Canyon seems the likeliest of the small arroyos near the coast to have offered the running stream mentioned by both diarists. The second party left the same camp on their next-to-last day but did not stop here at the base of the Tijuana hills, preferring to move out into the broad plain of the Tijuana River.

14 May: Puerto de San Diego (P), 32°43.3' N, 117°10.2' W, 20 ft., I11C69.

[Cañizares:] ... we set out at 10 a.m. in search of the port of San Diego. After traveling about a league we had the great joy of seeing in the distance the two packet boats, the *San Carlos* and *El Principe*, anchored in the port. After traveling 6 leagues we came to the place where the ships lay at anchor; we hailed them, and were answered from aboard the vessels and from the shelters on the beach. We reached the encampment at 5 p.m.... [6 leagues -- 6.0.]

[Crespí:] We set out a little before 10 a.m., course due N across this far-reaching plain, keeping a bit apart from the edge of the bay because of whatever mires might be there. It was a bit over  $6\frac{1}{2}$  hours' march, all over level, grassy ground, in which we must have made a good 6 leagues, when we gained sight of our long wished-for harbor of San Diego. [6 leagues -- 6.0.]

[Serra; 1 July:] ... we started early in the morning on our last day's journey. Already the beginnings of the port we were seeking are partly visible, and our guides explained to us its entrance and limits, and thus the labor of the road which is quite flat was made much more supportable than usual. The road in its last half winds considerably in order to avoid many sloughs which more or less penetrate the land from the sea, a reason why the journey, which it seems ought to take 3 hours at most, cost us somewhat more than 5, at the end of which we found ourselves on the bank of the port area -- not far from its mouth -- where the two packet boats were at anchor. Having been informed that we would need to go nearly a league to arrive at the place where the land expedition was encamped, and with it the four Father companions and most of the ships' crew, we continued on and finally arrived at the said camp ....

No one can say the exact configuration of the bayshore in 1769, so our route is a guess at the distance from water's edge required to satisfy Cañizares's report of "keeping a bit apart from the edge of the bay because of whatever mires might be there." Our location of the camp established by the distressed occupants of the *San Carlos* and the *Principe* was determined primarily by reference to the Pantoja Map of 1782, with its location of "Dead Men's Point" and repeated references (including Serra's above) to the subsequent 1-league move of the primary camp to a point near the south side of the San Diego River, probably somewhere in the vicinity of the later village ("Old Town"), just below and south of the permanent site soon to be chosen for the San Diego presidio.

The configuration of San Diego Bay and False Bay (today Misson Bay) on the last page of our map of the 1769 overland route is derived from "Map of the City of San Diego, drawn by Geo. B. Hensley, Searcher of Records," undated, but late nineteenth century. The course of the San Diego River prior to diversion into False Bay is taken from Map #12 RIV, 1853, San Diego Historical Society Research Archives, Map Collection.

### An endnote to mapping the route of the first overland expedition to San Diego

The authors of this work have studied maps and aerial photographs, read the cited documents, and traversed the ground. It is our belief that the route here mapped coincides with, or lies very near, that followed by the 1769 pioneers. If that sounds overconfident, remember that half the ground traversed is very rough and broken, and usually offers only one "best way" to

pass through. Most of the remainder, while easier to traverse, is markedly delimited by neighboring obstacles -- mountains, sea cliffs, or the ocean itself -- which reduce rights-of-way to narrow, easily definable corridors. In three stretches, the marches of 31 March, 12-13 April, and 13 May (which, in any event, make up only 5% of the route), there are feasible alternatives to the choices we have made. However, in each of those cases, the widest probable deviation from our route is 1 mi. or less, and rejoins our route after no more than 5 or 6 mi. of parallel travel.

In any event, this first close-plotting of the trail provides a clearer picture of the accomplishment of those who came overland in 1769; important because they soon made profound changes in San Diego and Alta California in general. As well, our map provides a basis for anyone interested to equip himself and go forth to know this long-lost pathway, much of which remains pristine, intensely beautiful and profoundly remote in an age when such qualities become rarer by the day.

#### References cited

Mancillas Pérez, Eduardo J.

1993 "El redescubrimiento de Ensenada por los franciscanos", *Calafia* 7(3):15-19.

Thickens, Virginia E. and Margaret Mollins

"Putting a lid on California: an unpublished diary of the Portolá expedition by José de Cañizares", *California Historical Society Quarterly* 31:109-124, 261-270, 343-354.