

# **THE DEATH CORAL CAVER**

**NUMBER 5**

**OCTOBER 1995**





# THE DEATH CORAL CAVER

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## PHOTO CREDITS

**FRONT COVER:** *Cueva del Machete Volando looms high on the imposing east face of Cerro el Viejo. 1984 photo by Terri Treacy*

**INSIDE FRONT:** *Charley Savvas climbs the second pitch in Pozo Guajalote. 1993 photo by Peter Sprouse*

**INSIDE BACK:** *Cyndie Walck clips her cowstail on the second drop in Cueva Huevón. 1994 photo by Peter Sprouse*

**BACK COVER:** *Borehole passage near the upstream sump in Cueva del Río Corona. 1995 photo by Susie Lasko*

## EDITORIAL

With some careful scrutiny the muddy cave floor soon yielded some life: tiny white isopods, only 2 millimeters long, which were probably a cave-adapted member of the family Triconiscidae. Since this was a new cave in a new area, these could well be a new species or even a new genus. We may never know.

PEP cavers have been very active over the past two decades in the collection of invertebrate cave fauna for study by taxonomic specialists. Thousands of specimens have been obtained from hundreds of caves, and while some new species have been described, many specimens sit in bottles on shelves for years due to a lack of taxonomists. One type of Triconiscid, plentiful in Sistema Purificación, has been known for twenty years, yet remains unstudied and un-described. The basic science work of taxonomy, it seems, cannot compete with the lure of the exciting new bio-sciences such as DNA genetics.

As the current taxonomists retire, whole groups of fauna are no longer studied. Look at the faunal lists in this issue and notice how often the term "undetermined" shows up.

While acknowledging the obvious recreational appeal of what we do, basic science is what the PEP is all about. Biological collecting is a part of that, but few of us are biologists, so we concentrate on what we do best as cavers: collecting and presenting information on caves. Each issue of the *Death Coral Caver* adds to the geographic database of caves of the Purificación Karst Region, most notably in the form of cave maps. This fifth issue contains 36 cave maps, making a total of 83 published so far on these pages. And we're just getting started.

A black and white photograph of a cave entrance, showing a dark, rocky opening with some light reflecting off the interior surfaces.

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## *Expedition Report:*

# Thanksgiving at El Viejo, 1994

by Barbara Luke

For a good time, call Peter Sprouse and get in on a Thanksgiving expedition to El Viejo. As a two-year veteran, I speak from experience. El Viejo is an area in the far western reaches of the study area of the Proyecto Espeleológico Purificación (PEP) named after the 3500-meter-high mountain that dominates the landscape. After having had a near-perfect experience there over Thanksgiving in 1993, I was counting the days until the opportunity came back around in 1994. As it turned out, the '94 expedition was perfect too, in its own way, ... but wait - I'm getting ahead of the story.

We headed out of Austin for parts underground and unknown after work on Friday. Our group traveled in a three-vehicle caravan: two Toyotas and a Dodge. The Toyotas were Glen Schneider's pickup and John Fogarty's Land Cruiser; the Dodge was Peter Sprouse's 1954 Power Wagon, complete with Antique Vehicle license plate. It was a former school bus which had fallen into caver hands almost two decades ago, gave faithful service for a time, then languished until Peter took it in and lovingly restored it. He painted it armadillo grey, and that's just what it looked like trundling down the highway -- a great big armadillo. Before the trip was over, the bus would garner heaps of attention from passers-by, cause us endless consternation, drink from countless Pemex pumps, and at one critical juncture, save the day, ... but again, I'm ahead of the story.

The cast of characters included mostly Texans: Peter Sprouse, Susie Lasko, John Fogarty, Cathy Winfrey, Sue Pruitt, Charley and Rachel Savvas, Linda Butler, Bailey Frohbose, Glen Schneider, Bev Shade, Chris Sobin, Paul Fambro, Terri Whitfield, and me. Joining us from Nevada were Scott Scheibner and Cyndie Walck. And along the way, we also picked up one wayward Canadian gold prospector, Chris Lloyd. With such a large and illustrious

crew, we had potential to really do some great things. And so we did.

But we had to get there first. Except for Paul and Terri, who drove separately, (and Chris Lloyd, who hasn't entered the story yet,) we left South Austin at about 10:30 p.m. We made our first stop just outside of town, which started a trend. This was a shakedown trip for the bus, and it turned out that there was a whole



*Clouds fill the coastal plain below Cerro el Viejo. 1994 photo by Peter Sprouse*

lotta shakin' goin' on, necessitating changes of points and tires, purging of demons both electrical and mechanical, and lots of stops to relieve the overheating radiator. Since you could say that I am "mechanically challenged" when it comes to motor vehicles, the many stops and starts meant nothing more to me than ample opportunities to visit, nap, climb trees, and see the back roads of northern México at a leisurely pace. And our first sunrise had overtaken us at the visa stop in Laredo, and by Saturday night we were camped on a gypsum plain under a full moon about 100 kilometers from Zaragoza.

By mid-afternoon Sunday, we were tanked up on gas and ready to depart Zaragoza for the unpaved road that ascends the flanks of El Viejo. Unfortunately, this proved to be yet another false start when progress ground to a halt at the first steep bend in the road. This time, the culprit was John's Land Cruiser: John was about to find out that his new-used vehicle was missing some parts that were needed to use the four-wheel drive in low range. While Charley and John investigated the problem, I set out with Glen and Rachel to search for Chris Lloyd who was supposed to meet us in Zaragoza. We learned that he had hiked off up the mountain looking for us. Since he didn't know where we were planning to camp, finding us would have been a sporting endeavor. Fortunately, we happened upon a gringo wandering around on the mountain, so all was well. Now we were just missing Terri and Paul, who we hoped would already be up at camp.

Without four-wheel low, John's vehicle wouldn't make it up to camp, so the Cruiser was ferried back to town, along with the big telescope John had taken pains to haul all the way down from Austin. The rest of the gear was consolidated in the bus, and about half of us started hiking up the mountain. We were passed once by Glen, hauling a load of passengers in his truck. At camp, Glen found Paul and Terri, who then headed back down the mountain in their truck to pick up some stragglers. Scott and I hiked into camp 3.5 hours after we started - a nice warm-up for the coming week. Soon everyone had reached camp except Peter, Susie, and Charley, who would be along shortly, in Bus Terms, with most of our gear. We admired the beautiful, clear sky and agreed how nice it would be to have a telescope. Then, we got a fire going and settled in for a party. I had extra reason to celebrate - I had just successfully defended my doctorate degree in geotechnical engineering AND had a birthday. What a great way to commemorate the occasions!

Monday morning at El Viejo: not only is the place riddled with holes in the ground, it is positively idyllic. Camp is on the shoulder of the mountain, in a high bowl full of swirling patches of morning fog. Visible in fits and starts is the near-vertical face of El Viejo rising above us, brilliant white in the sunshine. The peaceful calm is interrupted every so often by alien shrieks of parrots as they flap frantically along. There are plenty

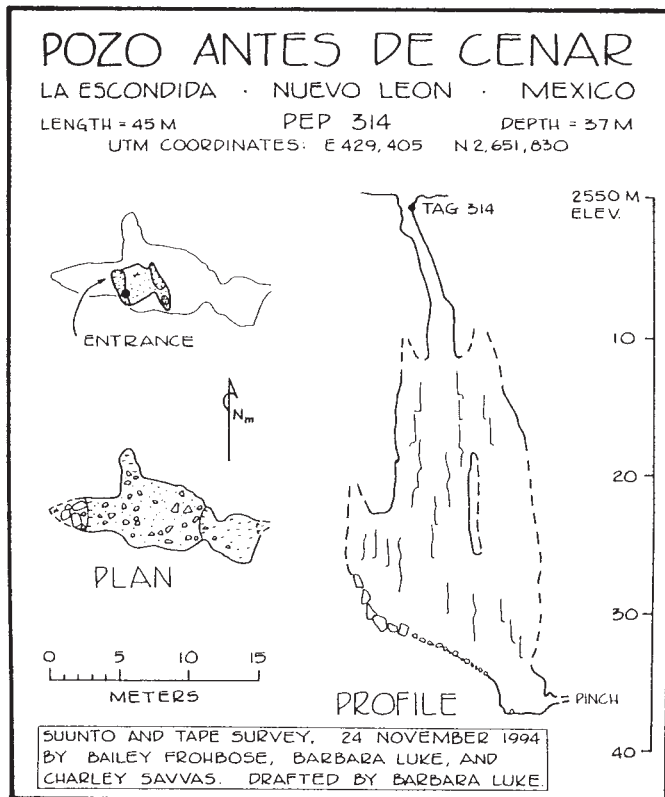
of trees for shade, climbing, and firewood. And no camp would be complete without the occasional visits from cattle, goats, and Mexican unicorns (pigs wearing wooden tricorner yokes to keep them out of the fenced gardens). The tents and trucks are drawn up around the big grey armadillo, with its matching tarp/overhang.

'Most everybody got underground before Monday was over. John, Charley and Chris Lloyd went off with Paul and Terri to pursue a climbing lead on the east side of El Viejo that clearly led to a gaping hole which had been taunting cavers since... well, since they first laid eyes on it. The rest of us broke into groups and explored pits close to camp. I went with Cathy, Rachel and Glen to explore and map two pits already marked on the topo map but not yet explored, a scant 500 meters northeast of camp. We floundered in the woods awhile and came across several gnat-filled holes, none of which looked promising enough to be worth breathing so many bugs over. When we finally came upon a nice, gnat-free pit, we dropped it. Glen rigged the first drop, about 8 meters, and went first. Rachel followed Glen. On the way down, she spotted a tag: PEP 242. Oops! Oh well; it was a very nice pit - a good start for Rachel with her new Frog. And we now had a landmark from which to navigate to our intended destination. We took a bearing, paced off the requisite distance, and lo! there was another pit. It turned out to be 28 meters deep, split between two pitches. Glen spotted a rodent, about 20 centimeters long, and then a couple of straw nests on the floor; so we christened the place Pozo Nido de la Rata: Rat's Nest Pit. Rachel dropped the first pitch and then climbed back out - bopping two pits in one day was enough for her. Glen and I mapped. Cathy's position on the team was Surface Support and Chief Navigator. After the mapping was done, we called it a day and navigated back to camp in the fog. We were the first group back, but the rest followed shortly, with everybody in by 7:30.

Comparing notes around the campfire, we learned that Susie, Bailey, and Scott had mapped a pit in the valley south of camp, Sótano de la Hoya del Pájaro. Peter, Sue, and Linda mapped Pozo Reina del Cobre, the Copper Queen, just to the north of Hoya del Pájaro. The cliff climbers made it partway up the face and left the rest for another day. Cyndie, Bev, and Chris Sobin had started out in the same area as my group and then wandered farther north. They found a ridgetop cave entrance that led to a 12-meter flowstone-covered pit. On the way out, Cyndie spotted a possible lead across the top of the pit. Sure enough, she found passage that continued a short ways to a promising dig. The team turned around for the day at that point, vowing to return tomorrow.

While gathering wood for the evening campfire, Charley found another pit, about fifty steps up the hillside from camp! After rolling off a big boulder, Bailey and Charley rigged and checked the pit. They worked their way several meters down to a point where a bolt

would be needed. Upon returning to the surface, they found everything quiet: the rest of us had gone to bed, and the bolt kit was packed away in the bus. Reluctantly, they decided to call it a night and leave the rest for the another time. This pit would come to be called Pozo Después de Cenar: the After-Dinner Pit. Over the course of several after-dinner forays, it would finally bottom out.



On Tuesday, the cliff-scalers returned to their mission, as did Cyndie and her group to their dig. I joined Peter, Susie, Glen, Scott, Linda, and Bailey on a hiking tour guided by Cliofas' nephew, Tranquilino. Tranquilino claimed he knew of a 400 meter (!) pit near his ranch, which is located in a valley to the south. We set off with Cliofas' son Javier following on a mule. It was a long and very beautiful hike. We passed through more karst, with numerous promising leads right along the edge of the trail. These temptations deterred us from Tranquilino's preferred pace, and he hurried us along. Each time we asked how much farther we had to go, the answer would be the same: "Lejissimo", very, very far. After several hours of not getting any closer to our goal, we happened upon a local gentleman who also had pits to show us. These pits looked promising, so we decided to go with the birds in the hand and leave the one in the bush for another day.

So Susie, Scott and I explored Pozo Divertoso (Fun Pit) while Peter, Glen and Bailey checked out Pozo Trabajoso (Hard Work Pit) just 50 meters or so down the trail. Susie rigged ours. We dropped 20 meters to a long, narrow room covered in flowstone. Its main attractions were two too-small exits, a big blue-gray centipede, and a goat skull. A pretty pit and a

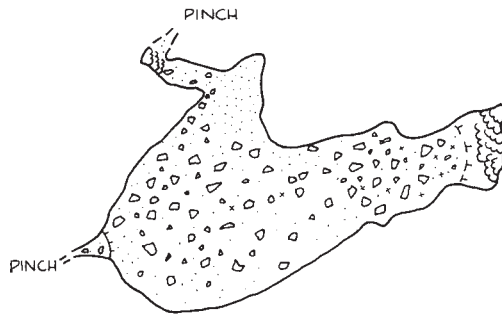
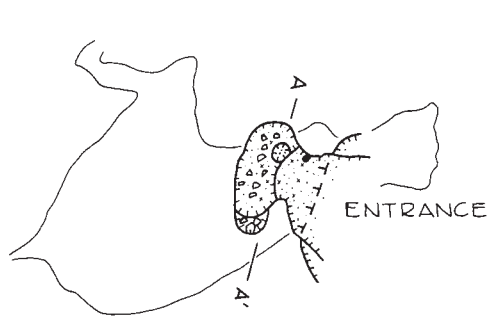
fun drop. Susie took photos while Scott tried out his new Frog system for the first time inside a cave. Meanwhile, Peter's group worked harder, had less fun, and ran out of rope. After descending a 22-m pitch, traversing a narrow rift, and placing two bolts, they found themselves in a narrow slot more than 50 meters deep, with questionable potential for permitting human passage. Ah well, another lead for another day. Our two groups rejoined and headed back at 8:30 p.m., reaching camp by 11:00.



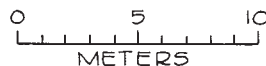
*Barbara and Scott at the bottom of the entrance drop in Pozo Divertoso. 1994 photo by Susie Lasko*

The climbers reported clear weather with great views of the valley. Their day ended with just one more pitch to go. Parts of the slope they had been ascending were booby-trapped with loose rocks, which periodically sprang loose. This kept the support party at the bottom of the slope on their toes. This day, the falling rocks were joined by a machete which came unsheathed as Charley was climbing. Apparently the loose rocks were interspersed with tenacious and obstructive vegetation. So the still-elusive cave had already earned its name: Cueva del Machete Volando (Cave of the Flying Machete).

Cyndie's crew opened up their dig to find more passage, mostly vertical. They were forced to turn around when they ran out of rope. This one would be called Cueva de Más Cable: More Rope Cave.



LOWER LEVEL

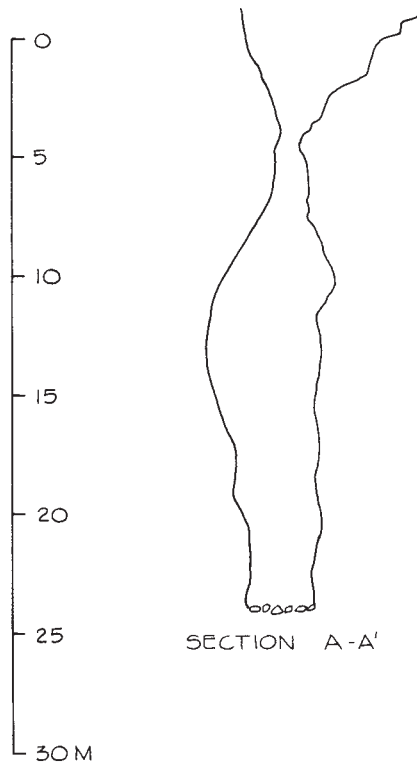


# POZO DIVERTOSO

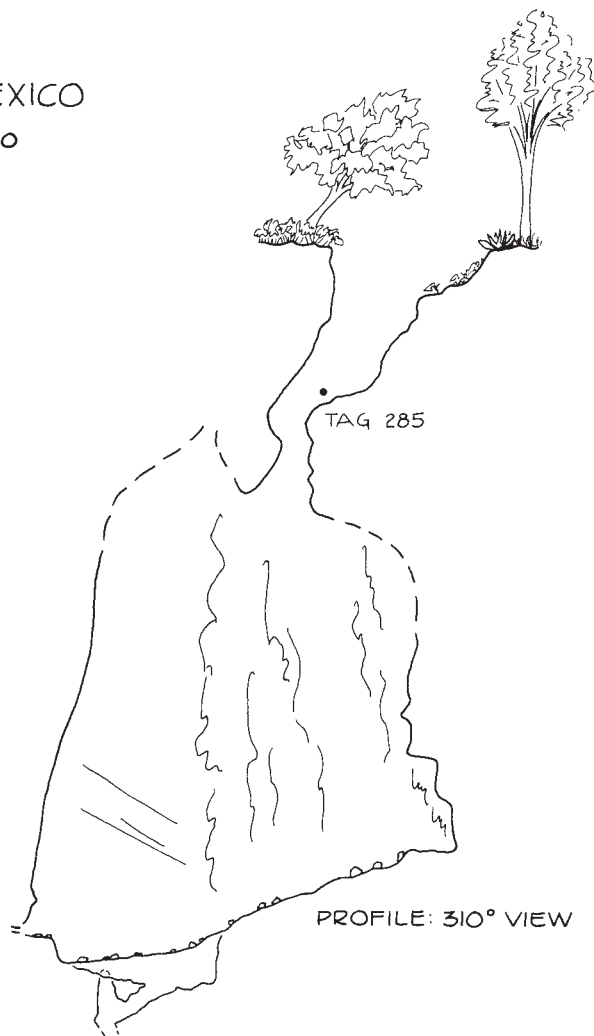
HOYA DEL MUERTO, NUEVO LEON, MEXICO

PEP 285 · UTM COORDINATES: E 430,230 N 2,647,490

LENGTH: 52M DEPTH: 30M ELEVATION: 2560 M



SECTION A-A'

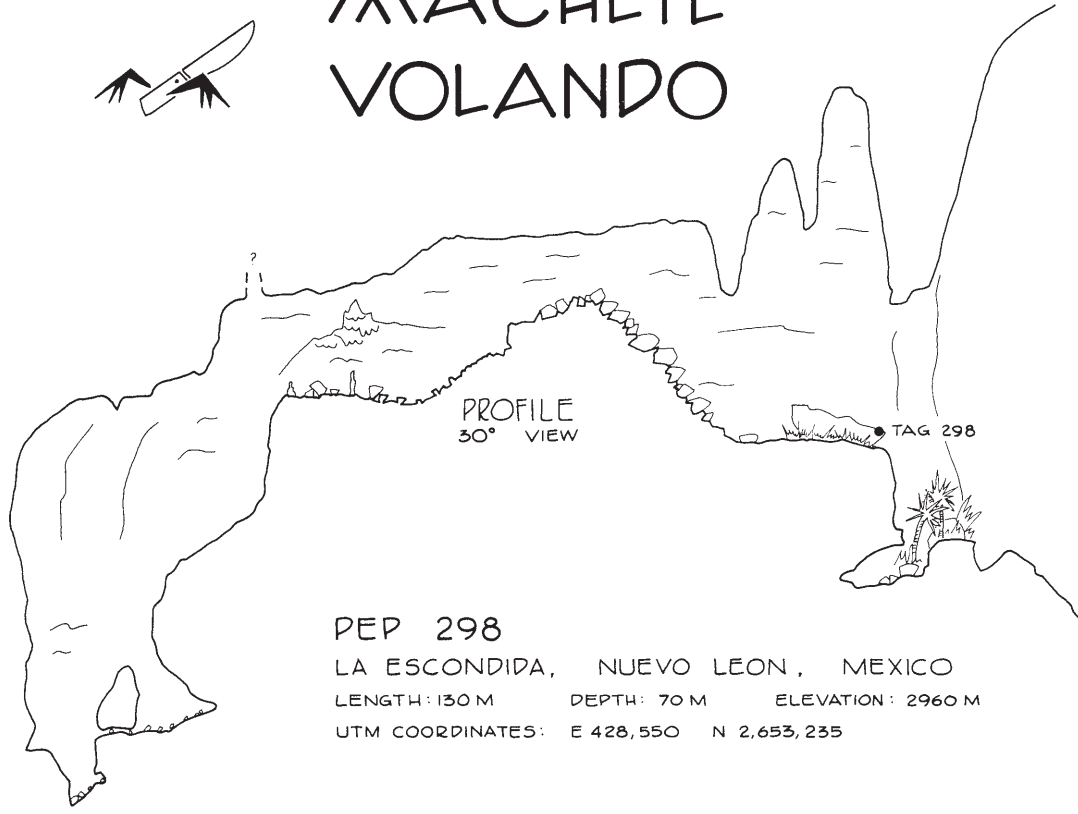


PROFILE: 310° VIEW

SUUNTO AND TAPE SURVEY, 22 NOVEMBER 1994 BY SUSIE LASKO, BARBARA LUKE, AND SCOTT SCHEIBNER. DRAFTED BY BARBARA LUKE.

CUEVA DE

# MACHETE VOLANDO



PROFILE  
30° VIEW

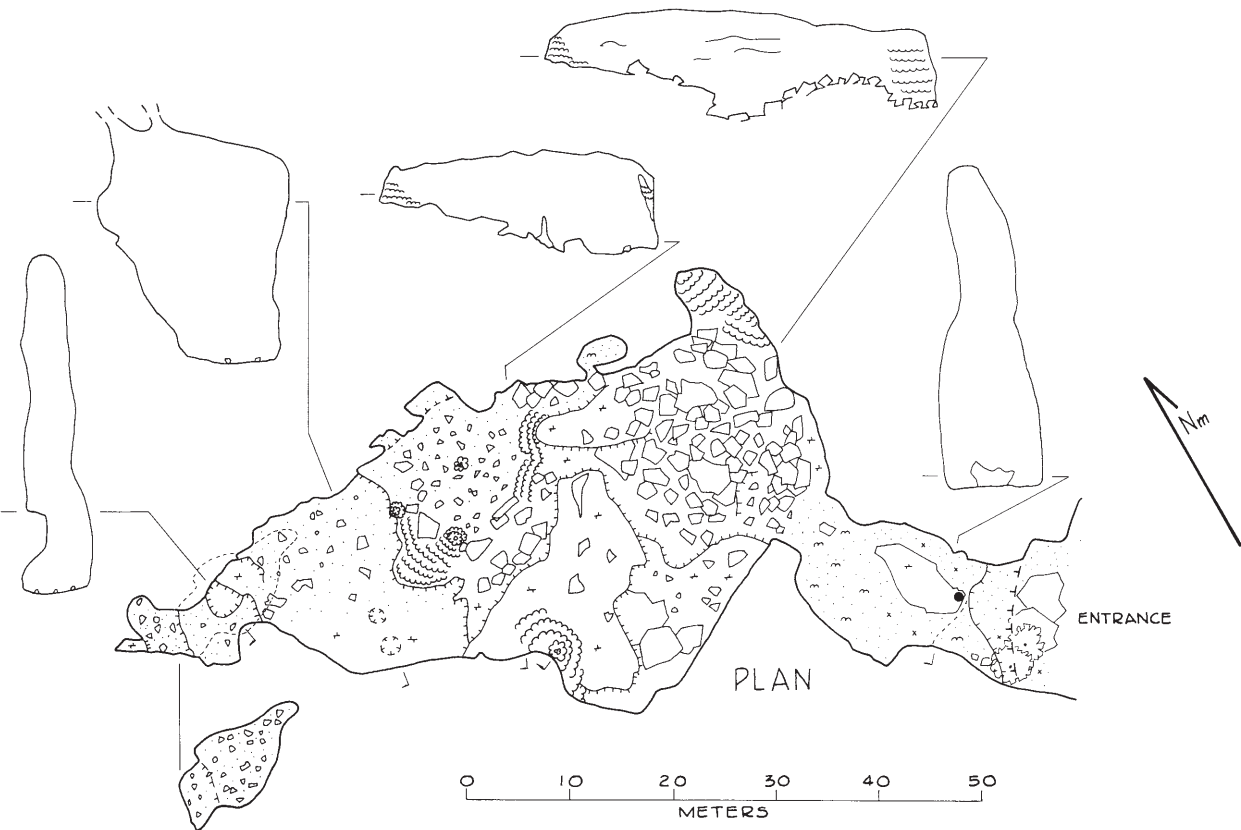
TAG 298

PEP 298

LA ESCONDIDA, NUEVO LEON, MEXICO

LENGTH: 130 M    DEPTH: 70 M    ELEVATION: 2960 M

UTM COORDINATES: E 428,550    N 2,653,235



PLAN

ENTRANCE



SUUNTO & TAPE SURVEY 23 NOVEMBER 1994 BY PAUL FAMBRO, JOHN FOGARTY, CHRIS LLOYD, SUE PRUITT, CHARLEY SAVVAS, AND TERRY WHITFIELD. DRAFTED BY BARBARA LUKE.



Wednesday was a rainy day in paradise. Cyndie's group took the day off from Más Cable. Cathy and Chris Sobin did a recon of a 20-meter-long "treasure cave" that Clifas had been digging in. They made plans to return to survey it the next day.



Clifas Rosales shows his "treasure" cave. 1992 photo by Susie Lasko

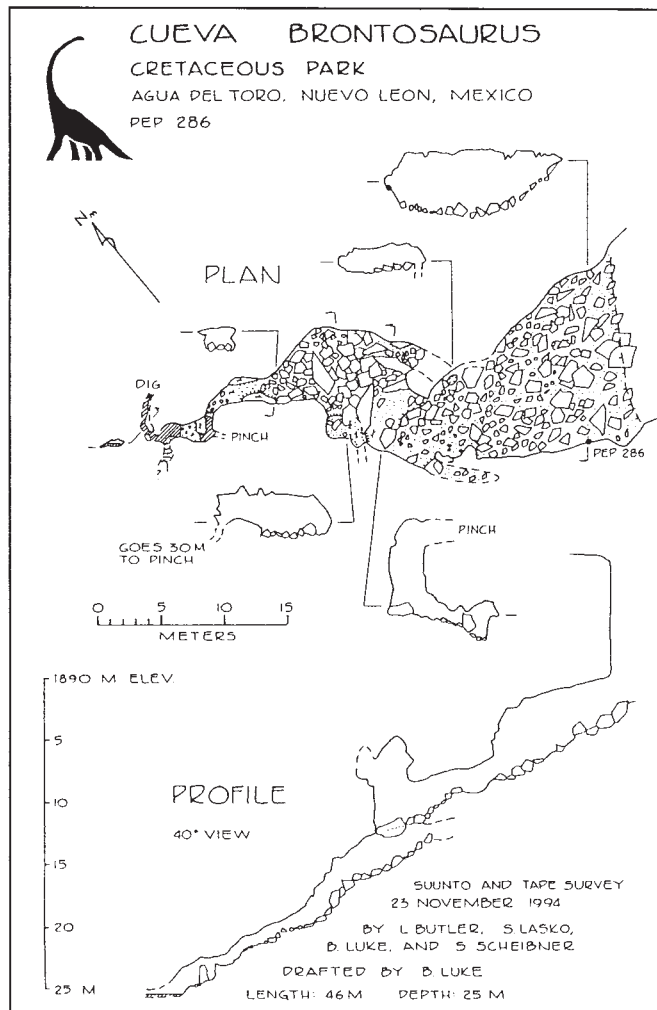
A large group went back to Machete Volando: John, Charley, Chris Lloyd, Paul, Terri, and Sue. John and Charley topped out at the cave entrance and rigged a rope so the rest could climb up. The cave was a dry and dusty borehole which led up over a mound and then down to a pair of blind pits, petering out after six survey stations. With de-rigging and all, the group didn't get back to camp until 5:30 a.m.

As for the other seven of us, Clifas had promised to show us a deep pit he knew of somewhere off to the east, but he didn't turn up at camp until we had already initiated Plan B: to pile into Glen's truck for a trip to Cretaceous Park, also known as Agua del Toro. This is an area to the northeast, about 4 kilometers as the parrot flies (considerably farther by road), which we had visited and christened during the '93 expedition. Last year, we had found and mapped one pit, Pozo Velociraptor, and scouted several promising leads.



View out of the entrance of Cueva Brontosaurus. 1994 photo by Susie Lasko

Susie, Scott, Linda, and I got out of the truck at lead B128. The cave had an impressive entrance chamber, beneath a tall vertical headwall at the bottom of a large sink which Peter had spotted on an aerial photo. When we had scouted the lead the year before, we found an owl in the entrance chamber. This year, the owl was still there. The funnel-shaped cave turned out to be about 50 meters long, and was a good challenge for me to sketch. Susie demonstrated mucha macha by free-climbing to a high lead and plunging into a cold, wet belly-crawl at the back. We called the place Cueva Brontosaurus to ensure the immortality of such a splendid moniker that purists now eschew (in favor of Apatosaurus).



Meanwhile, Peter, Glen, and Cyndie spent the day about a kilometer down the road surveying another cave Peter had found the year before. Beyond the 4 meter horizontal entrance, it descended about 20 meters to a possible dig which was also a mother lode for bugs. The place was christened Cueva Huevón.

The skies kept up a steady drizzle over most of the day and by the time we were ready to head back to camp, the roads were a mess. Glen put his truck through its paces, and we bypassed four logging trucks stopped alongside the road. Unfortunately, a fifth was

stopped in the middle of the road, abandoned, with no room to pass. Glen and I opted to stay with the vehicle, and everybody else hiked the 1.5-hours back to camp. Fortunately, we had each brought along a change of clothing in anticipation of getting wet in the caves. I slept comfortably curled up in the front seat, wearing several people's clothes and using more for pillow and blankets. Glen, whose mama brought him up right, didn't complain about his accommodations on the corrugated truck bed without much of a pad (ouch!).



*Glen Schneider surveys into the bottom chamber of Cueva Huevón. 1994 photo by Peter Sprouse*

On Thanksgiving morning, the sun came back out. In due time, the driver of the logging truck returned, with reinforcements, and set to work. He was eventually able to back the truck off the road so we could pass. We gave thanks, moved on, and made it back to camp by noon. The rest of the gang was still gearing up for the customary leisurely start. After another long wait for Cliofas which proved futile, Peter, Susie, John, and Scott hiked east up the hill to a lovely large sink. They located and mapped two pits: Pozo de las Salamandras Lentas (Pit of the Slow Salamanders), which was a 15-meter pit to a dig into which rocks could be dropped 3-6 meters; and Pozo de las Ratas Bravas

(use your imagination on that translation), a 9-meter pit followed by a 10-meter drop.

Cyndie and her original crew, Bev and Chris Sobin, returned to their ridgetop lead to continue the push. Enroute, they detoured down the valley to the north-east to push a lead that had been located a few years back. This turned out to be a 10 meter pit to a blind slope, which they named Pozo Cubierto.

I wound up joining Charley and Bailey surveying and exploring Pozo Antes de Cenar, another pit just on the edge of camp. The entrance had been plugged with tree trunks and branches, but Glen pulled his truck up alongside the pit, put some Black Sabbath on the stereo, and set to work with Chris Lloyd, Charley, and Bailey at cleaning it out. Charley rigged the drop, which needed lots of gardening. It was a pretty flow-stone-draped pit with a total depth of 38 meters, 25 of it free. The drop ended in an oblong chamber with a muddy dig at the back. This was Bailey's first go at reading instruments. As he lay on the floor at the bottom of the drop, taking a reading, some rocks and debris started to fall. He jumped safely out of the way, and the shower continued for a few long seconds, then stopped. I was pretty unsettled by this state of affairs, although Charley was confident that the rain was over. He was right, of course, but still I was happy to regain the top of that drop.

Peter's group returned shortly after we surfaced, and we shared a splendid turkey feast, complete with dressing and cranberry sauce. Cyndie's group returned last, after having run out of rope again! Cueva de Más Cable was really living up to its name. Unfortunately, Cyndie had become a casualty: she had taken a falling rock with her shoulder. It turned out to be a bone bruise, which would take some weeks to heal. Although she couldn't really move the shoulder, she vowed to return to the cave the next day.

On Friday, a large group headed back to Más Cable: John, Charley, both Chrises, Cyndie, and Susie. I went along with Cathy, Rachel, Sue, Bailey, and Glen to Cliofas' treasure cave and helped Cathy sketch her second cave ever. Alas, we found no treasure. The rest of my day slipped by between naps, to recover from the Thanksgiving festivities, and packing for the return trip. Bailey did a solo trip through Pozo Después de Cenar to de-rig. Cyndie and Susie returned in good time, having made a photo trip down the first 45 meters in Más Cable, to the bottom of the pitch now known as Cyndie's Flat Rock Drop. The rest of the Más Cable gang didn't return until about 9 p.m. They had finally bottomed out the nearly all-vertical cave at about 150 meters. We loaded up and headed back down the mountain, regrouping on the town square in Zaragoza. Glen and Paul and their passengers headed out right away, and the rest of us rented the World's Cheapest Hotel Room for the night, at 5 pesos per person. It was well worth it just for the bath!



*Cyndie Walck negotiates a pitch in Cueva de Más Cable. 1994 photo by Susie Lasko*



*Charley Savvas in the Entrance of Cueva de Más Cable. 1994 photo by Peter Sprouse*



*Barbara Luke at the entrance to Cueva Brontosaurus, which opens under a large headwall. 1994 photo by Susie Lasko*

The ride home was pretty much the reverse of the ride down: rolling along at a stately pace, stopping now and then for miscellaneous tinkering and cooling down. We left Chris Lloyd at the bus station in San Roberto to make his way back to Guadalajara, whence he came. We traveled via Linares and made the obligatory stop at the stone mural, although it was hard to see in the dark. Driving through Monterrey was a breeze at 1 a.m. We stopped at the microwave towers of Mamulique for a few hours to sleep (I love that place but I'm not sure why). We crossed the border on Sunday afternoon. At Las Asadas, the customary Mexican-restaurant stop in Laredo, we ran into Terri and Paul. After parting company with us at Zaragoza, they had taken a side trip to Real de Catorce.

Safely back in the USA, both Cruisers left us, and we the Bus People rolled steadily homeward, reaching Hedgewood Drive in South Austin, the End of the Road, just after midnight, Sunday morning. It was a mellow ending to an expedition that can be gauged a success by the many caves and pits we explored and mapped, but will be better remembered by me as the passing of yet another perfect Thanksgiving in the company of good friends.

# CAVES OF CERRO EL VIEJO II



Two cave entrances are visible in this view of the south face of Cerro el Viejo. On the left side of the cliff above the pine is Cueva de San Juan. In the center is an unexplored cave. 1992 photo by Susie Lasko

by Peter Sprouse

PEP cavers have been exploring caves around Cerro el Viejo since 1984. El Viejo is a high peak located on the western side of the Purificación Karst Region, just east of the town of Zaragoza, Nuevo León. The highest elevations in the project area are in this zone, due to fault overthrusting. From El Viejo's 3500-meter peak, elevations drop rapidly into deep canyons to the northeast, 2500 meters lower. The area is very sparsely populated.

A fairly well-developed network of logging roads give access to part of the area, but reaching the highest and lowest elevations can involve long hikes and ropework. Spectacular vistas can be seen from almost any point.

The first four trips to the area were described in an article in the first issue of this publication. Twenty-two caves were documented at that time. Since then there have been three more expeditions to El Viejo, resulting in the survey of 32 more caves. Several caves have reached depths of over 100 meters, including Pozo del Primero de Septiembre, which has a 109 meter entrance pit. Continuing cave systems have proved elusive thus far, but the potential is enormous.

Barbara Luke gives an account of the 1994 expedition elsewhere in this issue; for accounts of the

two previous trips, see the last two issues of the *Death Coral Caver*.

## EL VIEJO AREA CAVE DESCRIPTIONS

### *Contributors:*

Susie Lasko, Barbara Luke, and Peter Sprouse

*Faunal lists compiled by James R. Reddell*

### **POZO REPISA**

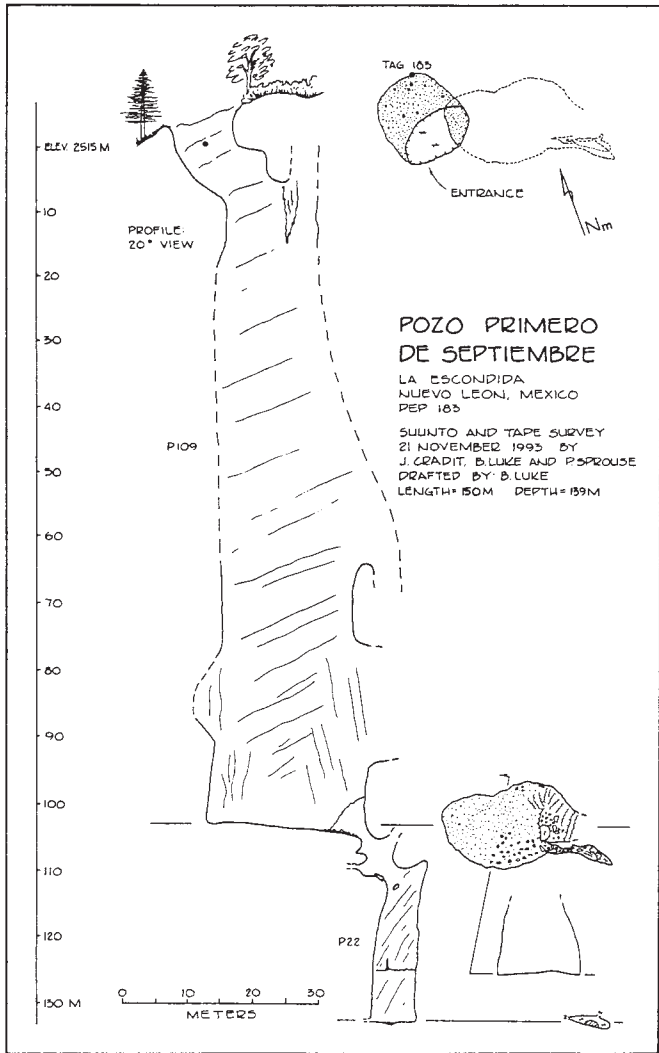
PEP 242

La Escondida, Nuevo León

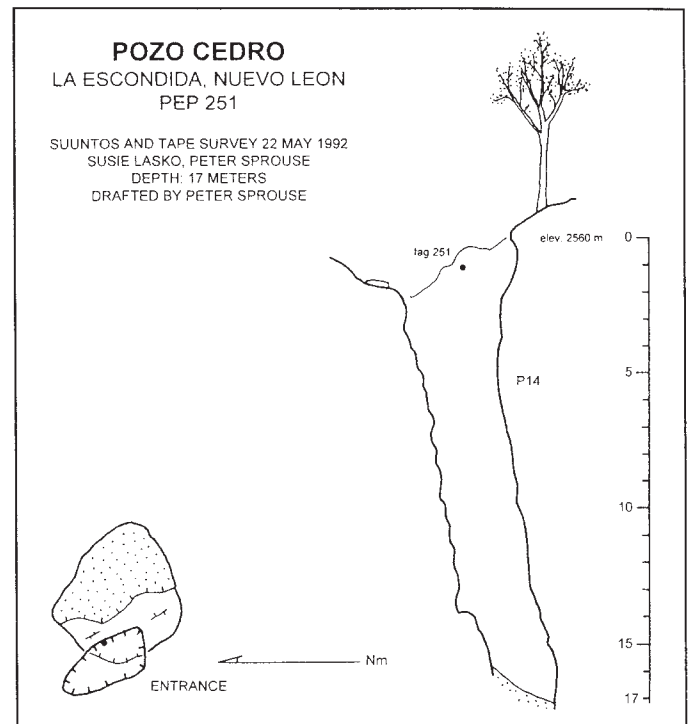
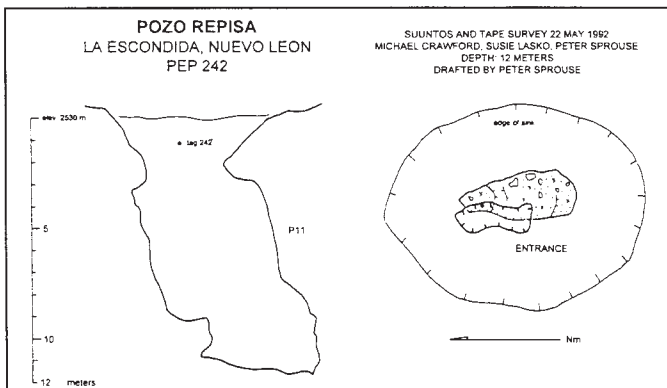
Length: 15 meters Depth: 12 meters

UTM coordinates: E 429,685 N 2,652,100

This pit is located 350 meters southeast of La Escondida at an elevation of 2530 meters. The entrance is in the middle of a valley and probably takes some drainage. It consists of an 11 meter pitch broken by a ledge near the bottom. The entrance to this pit was located in October 1987 by Susie Lasko and Peter Sprouse. They explored and surveyed it along with Michael Crawford on 22 May 1992. (PS)



*Peter Sprouse prepares to drop a "snake fight" coil down Pozo Repisa. 1992 photo by Susie Lasko*



**POZO CEDRO** PEP 251  
 La Escondida, Nuevo León  
 Depth: 17 meters  
 UTM coordinates: E 429,680 N 2,651,985

This pit is situated 450 meters southeast of La Escondida at 2560 meters elevation. It is on the south slope of a valley. The 14 meter pitch ends in fill. Pozo Cedro was explored on 22 May 1992 by Susie Lasko and Peter Sprouse. (PS)



Peter Sprouse in Pozo Cedro. 1992 photo by Susie Lasko

**CUEVA CONTACTO**

PEP 252

La Escondida, Nuevo León  
 Length: 8 meters Depth: 6 meters  
 UTM coordinates: E 429,235 N 2,651,635

Cueva Contacto is located 700 meters south-southwest of La Escondida at an elevation of 2560 meters. It is in a sink just to the east of Cueva de los Frijoles, and just north of the road. A climbdown into a rift soon ends at a blowing pinch, which could be the other end of Frijoles. Susie Lasko and Peter Sprouse explored this cave on 22 May 1992. (PS)

**CUEVA MICROSALAMANQUESA**

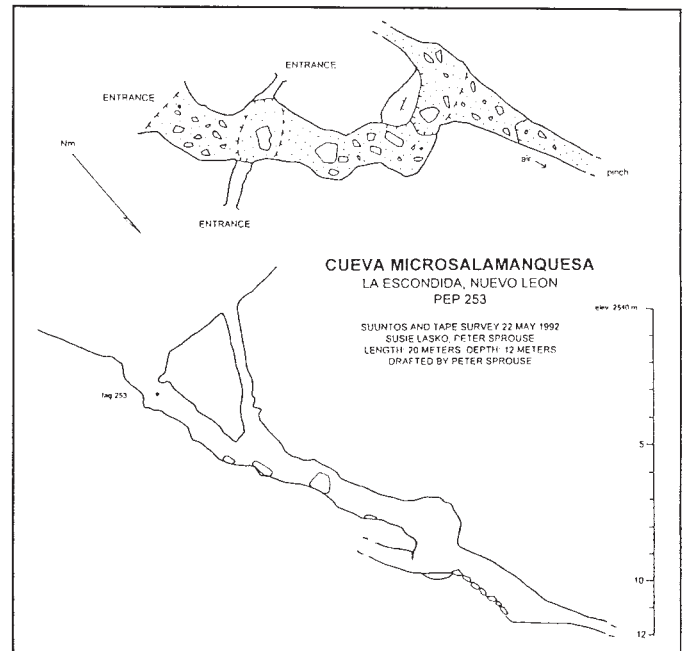
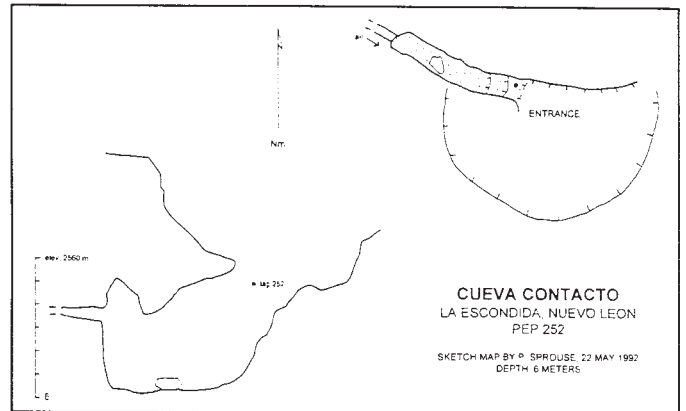
PEP 253

La Escondida, Nuevo León  
 Length: 20 meters Depth: 12 meters.  
 UTM coordinates: E 429,166 N 2,651,015

This cave is located 900 meters south-southwest of La Escondida, just south of the road at 2540 meters elevation. The entrance passage slopes down underneath two skylights to pinch at a depth of 12 meters. This pinch takes water and air, but would be

awkward to enlarge. Discovered in 1987, this cave was surveyed on 22 May 1992 by Susie Lasko and Peter Sprouse. (PS)

- Isopods: Trichoniscidae genus and species (troglomite)
- Spiders: Araneomorphae undetermined
- Millipedes: Diplopoda undetermined
- Xystodesmidae genus and species
- Springtails: *Pseudosinella reddelli* Christiansen (troglophile)
- Cave crickets: Rhaphidophoridae genus and species (troglaxene)
- Ground beetles: Trechinae genus and species (troglomite)
- Moths: Lepidoptera undetermined



**POZO DE LAS AMAPOLAS**

PEP 254

La Escondida, Nuevo León  
 Length: 22 meters Depth: 11 meters  
 UTM coordinates: E 430,525 N 2,651,918

Pozo de las Amapolas is located 1200 meters east-southeast of La Escondida, at an elevation of 2530 meters. It is adjacent to a cultivated field. The entrance pit is 7 meters across and 10 meters deep, but an apparent passage below soon ends. This pit was

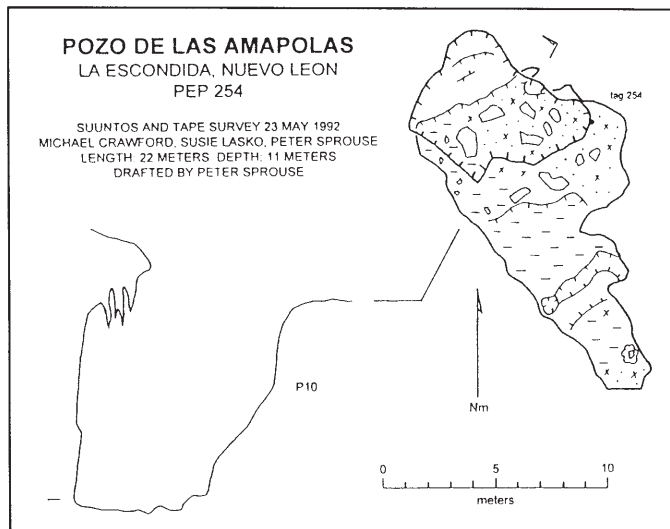
mapped on 23 May 1992 by Michael Crawford, Susie Lasko, and Peter Sprouse. (PS)

Spiders: Araneomorphae undetermined  
 Millipedes: Diplopoda undetermined

**POZO DEL CALVARIO** PEP 255

La Escondida, Nuevo León  
 Length: 17 meters Depth: 13 meters  
 UTM coordinates: E 430,101 N 2,652,479

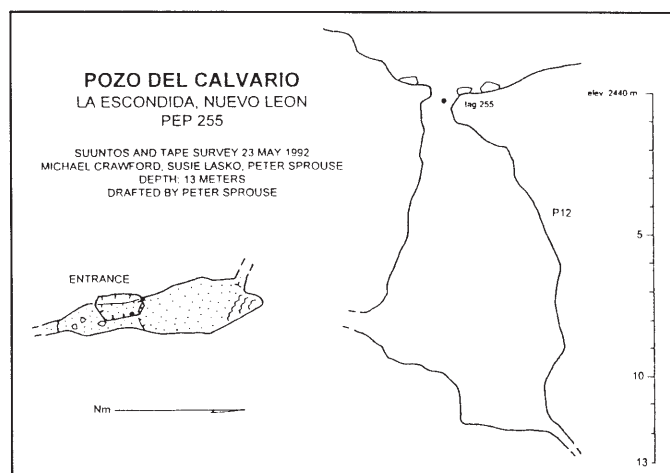
This pit is situated 700 meters east-northeast of La Escondida, at an elevation of 2440 meters. Although it receives some catchment, the cave ends at the bottom of the 12-meter entrance pit. Pozo del Calvario was mapped on 23 May 1992 by Michael Crawford, Susie Lasko, and Peter Sprouse. (PS)



**POZO DE LUCINO** PEP 256

La Escondida, Nuevo León  
 Length: 65 meters Depth: 46 meters  
 UTM coordinates: E 430,577 N 2,653,015

Pozo de Lucino is located 1800 meters northeast of La Escondida, at 2370 meters elevation. The entrance is above a road in a sink 7 meters across. The 45-meter pit is broken by a major ledge partway down. The floor consists of deep mud with a sawn log partly buried in it from the fall. A short formation room extends to one side. Michael Crawford, Susie Lasko, and Peter Sprouse surveyed Pozo de Lucino on 23 May 1992. (PS)

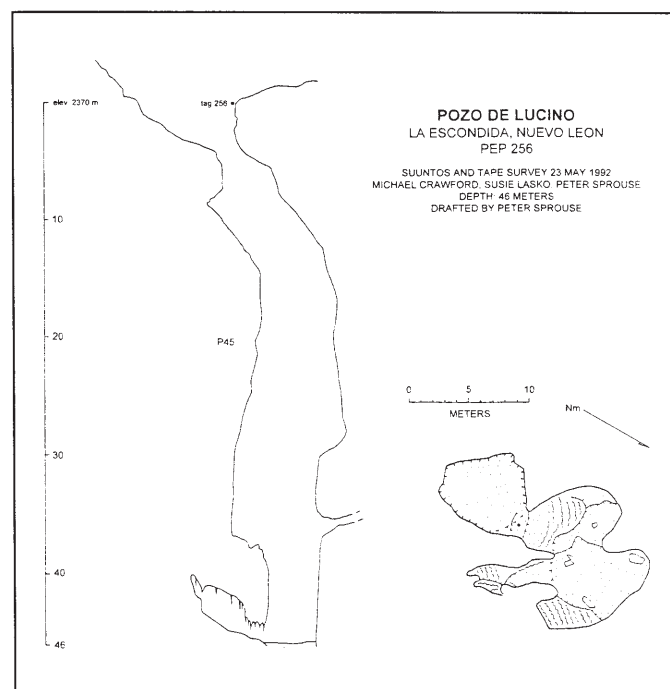


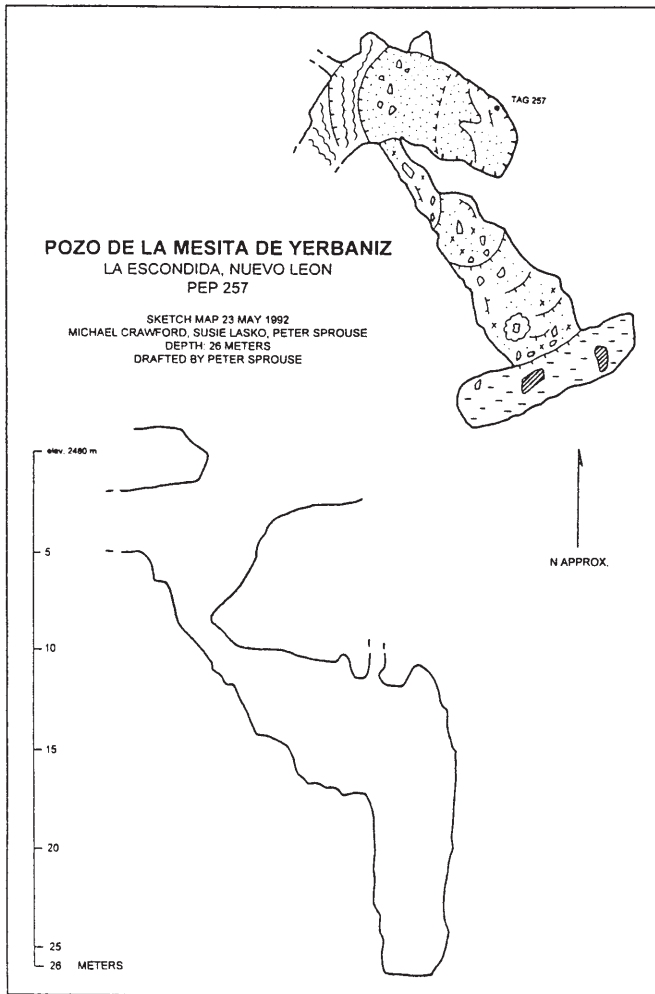
Harvestmen: Opiliona undetermined  
 Centipedes: Lithobiomorpha undetermined  
 Millipedes: Diplopoda undetermined  
 Cave crickets: Rhabdophoridae genus and specie (troglaxene)  
 Ground beetles: Carabidae genus and species  
 Trechinae genus and species (troglóbite)  
 Comb-clawed beetles: *Xylorcytes* sp. (accidental)

**POZO DE LA MESITA DE YERBANIZ** PEP 257

La Escondida, Nuevo León  
 Length: 30 meters Depth: 26 meters  
 UTM coordinates: E 429,972 N 2,652,257

This pit is situated about 600 meters east-southeast of La Escondida, at an elevation of 2480 meters. Two passages extend in from the entrance climb-down. Ahead is an unexplored horizontal passage, while a pit drops down to the left. This was partially explored on a short rope, but appeared to end at a depth of about 26 meters. Michael Crawford, Susie Lasko, and Peter Sprouse checked this cave on 23 May 1992. (PS)





Michael Crawford checks out Pozo del Rincón de la Virgen. 1992 photo by Susie Lasko

**POZO CON HUEVOS** PEP 259  
 Las Trojas, Nuevo León  
 Depth: 18 meters  
 UTM coordinates: E 428,293 N 2,649,849

Pozo Con Huevos is located 800 meters southeast of Las Trojas, at an elevation of 2380 meters. Situated in a small valley, it likely takes some drainage. Despite this, it is blind at the bottom of the 18 meter pitch. This pit was mapped on 24 May 1992 by Michael Crawford, Susie Lasko, and Peter Sprouse. (PS)

**POZO DE LOS PATEROS** PEP 260  
 Las Trojas, Nuevo León  
 Depth: 64 meters  
 UTM coordinates: E 428,355 N 2,649,585

This pit is located 900 meters southeast of Las Trojas, at 2420 meters elevation. It is not far up-valley from Pozo Con Huevos. Below the 54 meter entrance shaft is a steeply sloping rift which soon pinches. It was mapped on 24 May 1992 by Susie Lasko and Peter Sprouse, with Michael Crawford doing the exploration. (PS)

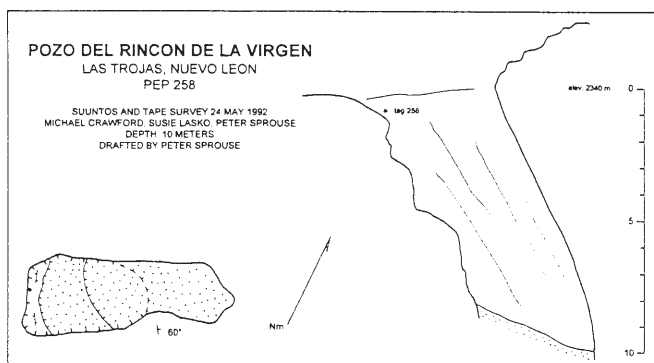
**CUEVA VELOCIRAPTOR** PEP 278  
 Agua del Toro, Nuevo León  
 Length: 27 meters Depth: 23 meters  
 UTM coordinates: E 432,398 N 2,654,051

This cave is situated 500 meters southeast of Agua del Toro, at an elevation of 1795 meters. A steep climbdown into a narrow sink gives access to a 16 meter drop just under the dripline. At the bottom a rubble slope leads down to a choke. Digging on this proved fruitless during exploration on 22 November 1993 by Jon Cradit, Paul Fambro, Barbara Luke, Charley Savvas, and Peter Sprouse. (PS)

Spiders: Araneomorphae undetermined  
 Mites: Acarina undetermined

**POZO DEL RINCON DE LA VIRGEN** PEP 258  
 Las Trojas, Nuevo León  
 Depth: 10 meters  
 UTM coordinates: E 428,750 N 2,650,541

This pit is located 750 meters northeast of Las Trojas, at an elevation of 2340 meters. It is situated in the middle of a valley. The 10-meter pit is formed along beds that dip steeply to the northeast. It was explored on 24 May 1992 by Michael Crawford, Susie Lasko, and Peter Sprouse. (PS)

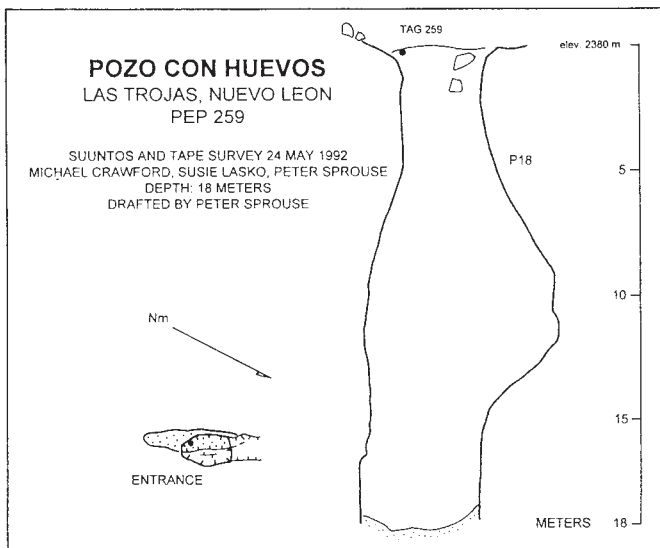
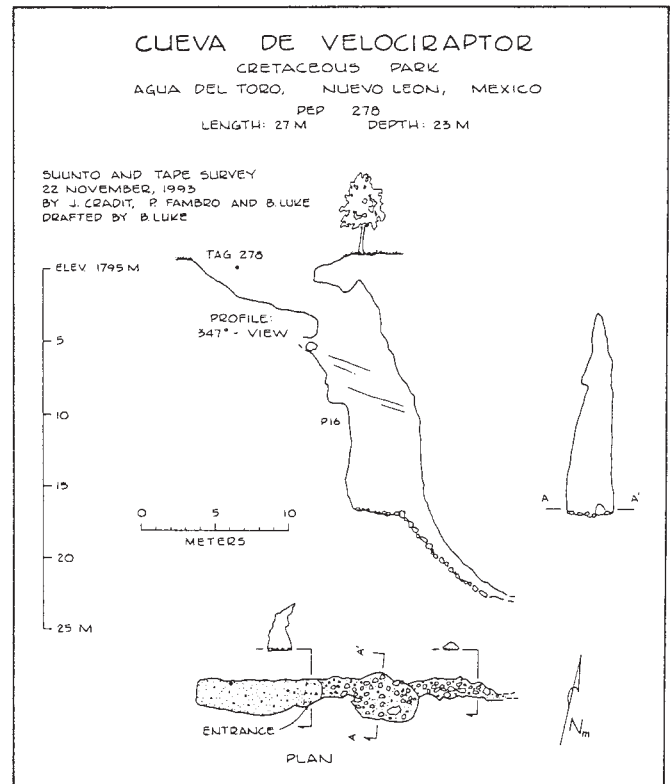
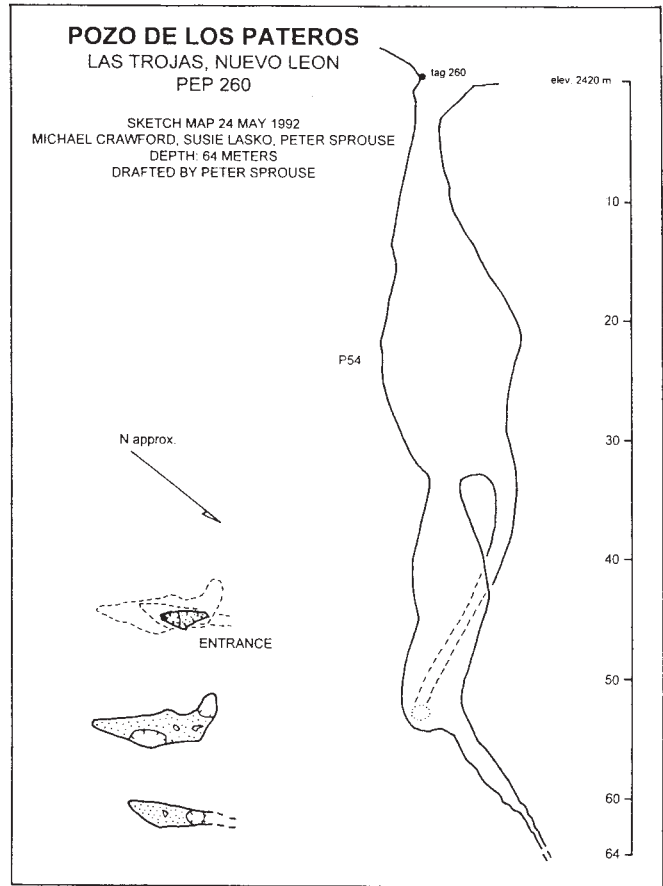




Harvestmen: Sclerosomatidae genus and species (troglaxene)  
 Millipedes: Diplopoda undetermined  
 Springtails: Collembola undetermined  
 Insects: Insecta larvae undetermined  
 Leaf hoppers: Homoptera undetermined  
 Ground beetles: Trechinae genus and species (troglomite)  
 Rove beetles: Staphylinidae genus and species  
 Flies: Diptera undetermined



Michael Crawford checks out Pozo Con Huevos. 1992 photo by Susie Lasko



## CUEVA DE SAN JUAN

PEP 279

La Escondida, Nuevo León

Length: 90 meters Depth: 24 meters

UTM coordinates: E 427,123 N 2,651,640

Cueva de San Juan is located high on the south cliff face of Cerro el Viejo at 2762 meters elevation. It is 1500 meters north-northwest of Las Trojas. After a steep ascent up a rocky couloir, a ledge is traversed to give a rappel over the top of the cave entrance. This shelter-like entrance is 20 meters high and 35 meters wide and affords a spectacular across the valleys to the south. Off of the back part of the cave extend several loops and small formation mazes. A 6-meter drop gives access to a dusty dung room, the end of the cave. Cueva de San Juan was mapped on 23 November 1993 by Jon Cradit, Paul Fambro, Barbara Luke, and Peter Sprouse. (PS)

Spiders: Araneomorphae undetermined

Cave crickets: Rhabdophoridae genus and species (troglaxene)

Darkling beetles: Tenebrionidae genus and species (troglophile)

Wasps: Hymenoptera undetermined

Crane flies: Tipulidae genus and species

## CUEVA DEL TENEDOR

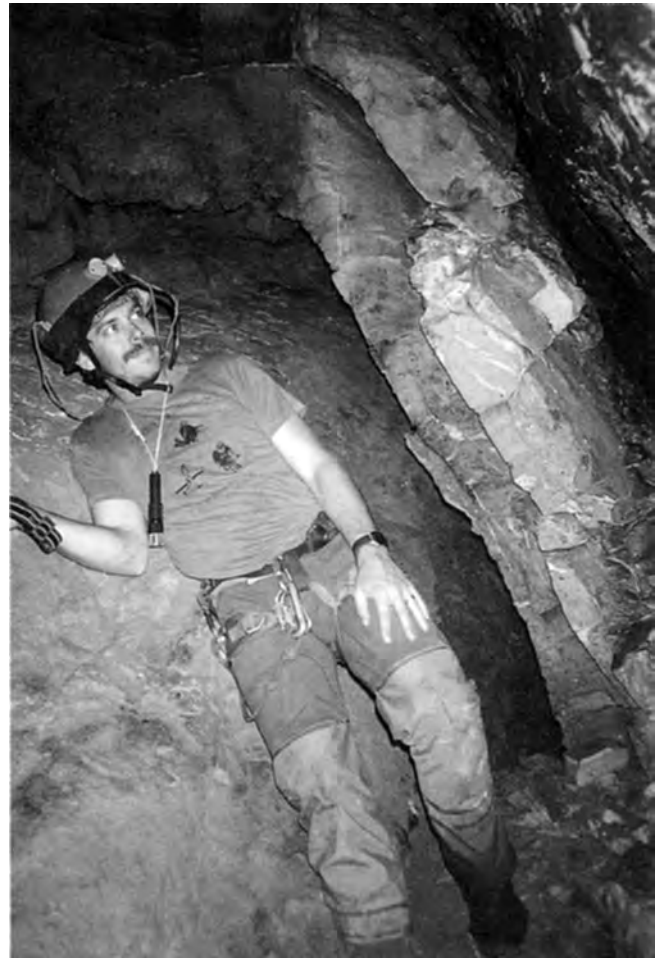
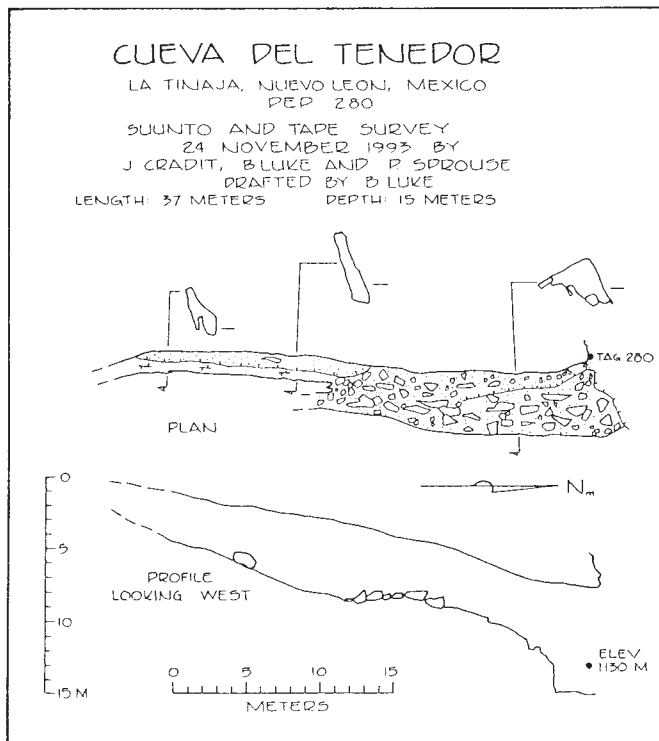
PEP 280

Garza, Nuevo León

Length: 37 meters Depth: 15 meters

UTM coordinates: E 434,265 N 2,659,200

This cave is situated in a deep canyon 3100 meters east of Garza, at 1132 meters elevation. It is in the south wall a short distance above the canyon bottom, and was formed by anticlinal collapse. The cave slopes gently upward to a bedrock pinch 37 meters in. It was mapped on 24 November 1993 by Jon Cradit, Barbara Luke, and Peter Sprouse. (PS)



Jon Cradit leans with the folds in Cueva del Tenedor. 1993 photo by Peter Sprouse

## POZO PISO FALSO

PEP 281

La Escondida, Nuevo León

Length: 26 meters Depth: 23 meters

UTM coordinates: E 430,245 N 2,649,949

This pit is located 2500 meters south-southeast of La Escondida, at an elevation of 2698 meters. It is in a wide closed valley known as Huerta de Genaro. The pit is developed on steeply sloping east-dipping beds. Below the initial 16-meter drop a dig opened up another pitch of 9 meters. Although there was airflow at the bottom digging proved futile. This pit was mapped on 25 November 1993 by Jon Cradit, Barbara Luke, and Charley Savvas. (PS)

Spiders: Araneomorphae undetermined

Harvestmen: Laniatores undetermined

Millipedes: Diplopoda undetermined

Cave crickets: Rhabdophoridae genus and species (troglaxene)

Darkling beetles: Tenebrionidae genus and species (troglophile)

Moths: Lepidoptera undetermined

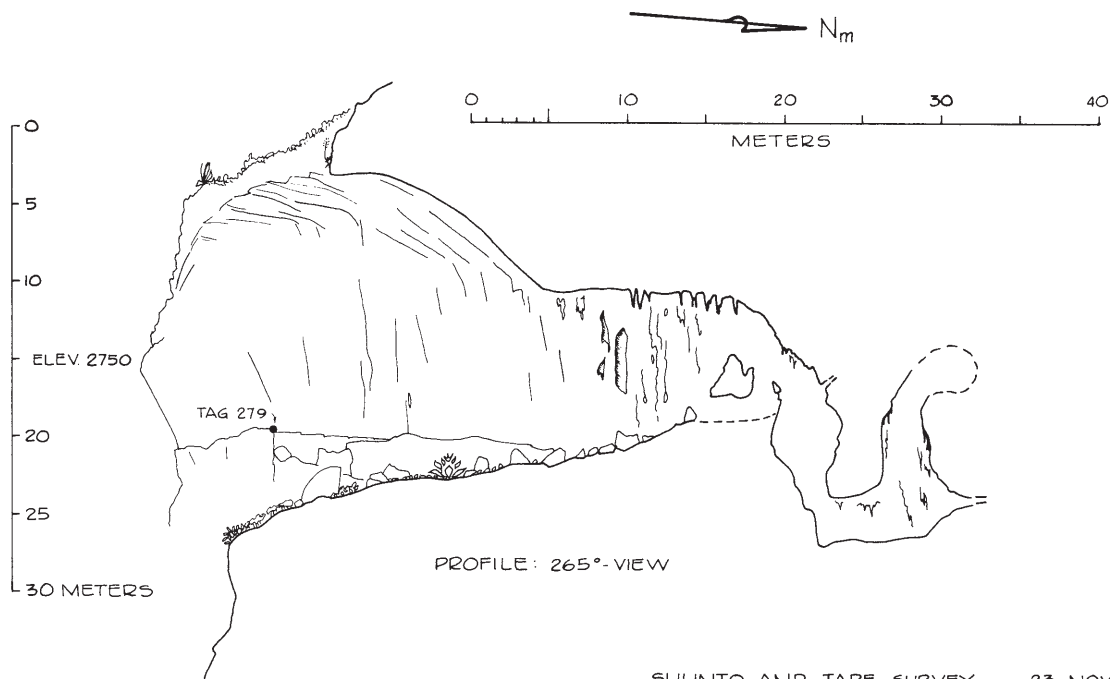
# CUEVA DE SAN JUAN

LA ESCONDIDA ~ NUEVO LEON ~ MEXICO

PEP 279

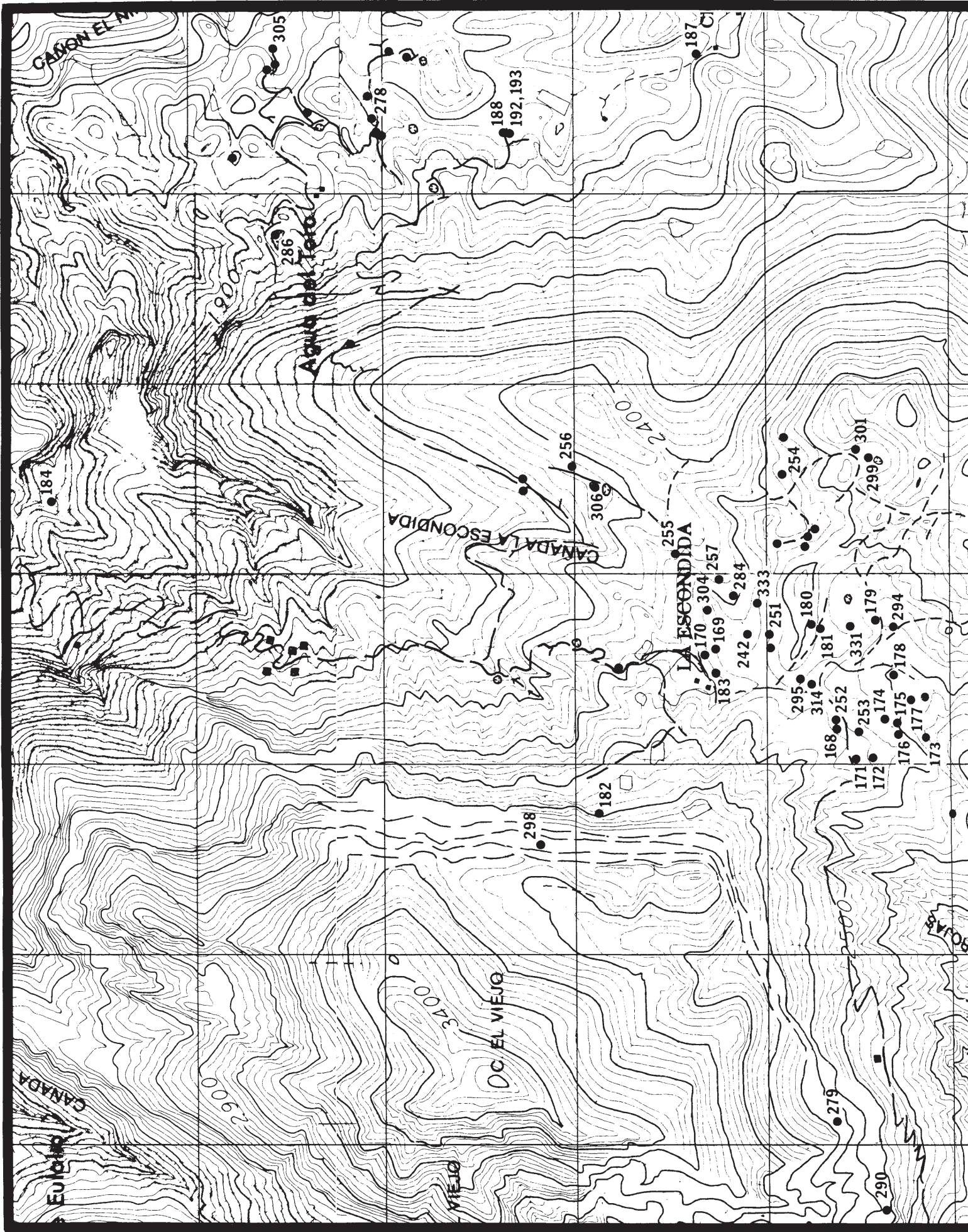
LENGTH: 90 METERS

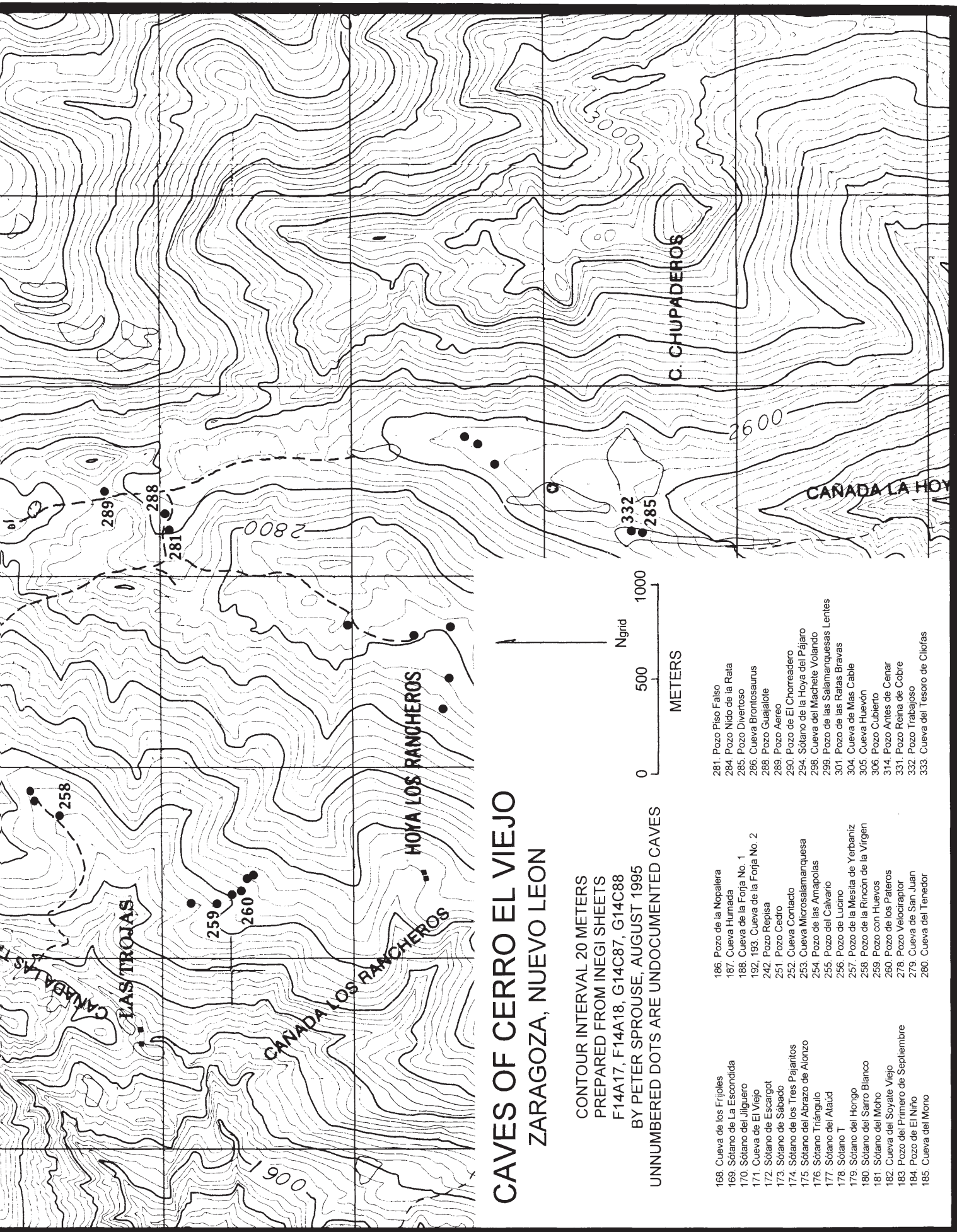
DEPTH: 24 METERS



SUUNTO AND TAPE SURVEY 23 NOVEMBER 1993  
BY J. CRADIT, P. FAMBRO, B. LUKE AND P. SPROUSE

DRAFTED BY B. LUKE





# CAVES OF CERRO EL VIEJO ZARAGOZA, NUEVO LEON

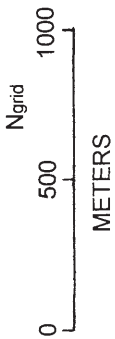
CONTOUR INTERVAL 20 METERS  
PREPARED FROM INEGI SHEETS  
F14A17, F14A18, G14C87, G14C88

BY PETER SPROUSE, AUGUST 1995

UNNUMBERED DOTS ARE UNDOCUMENTED CAVES

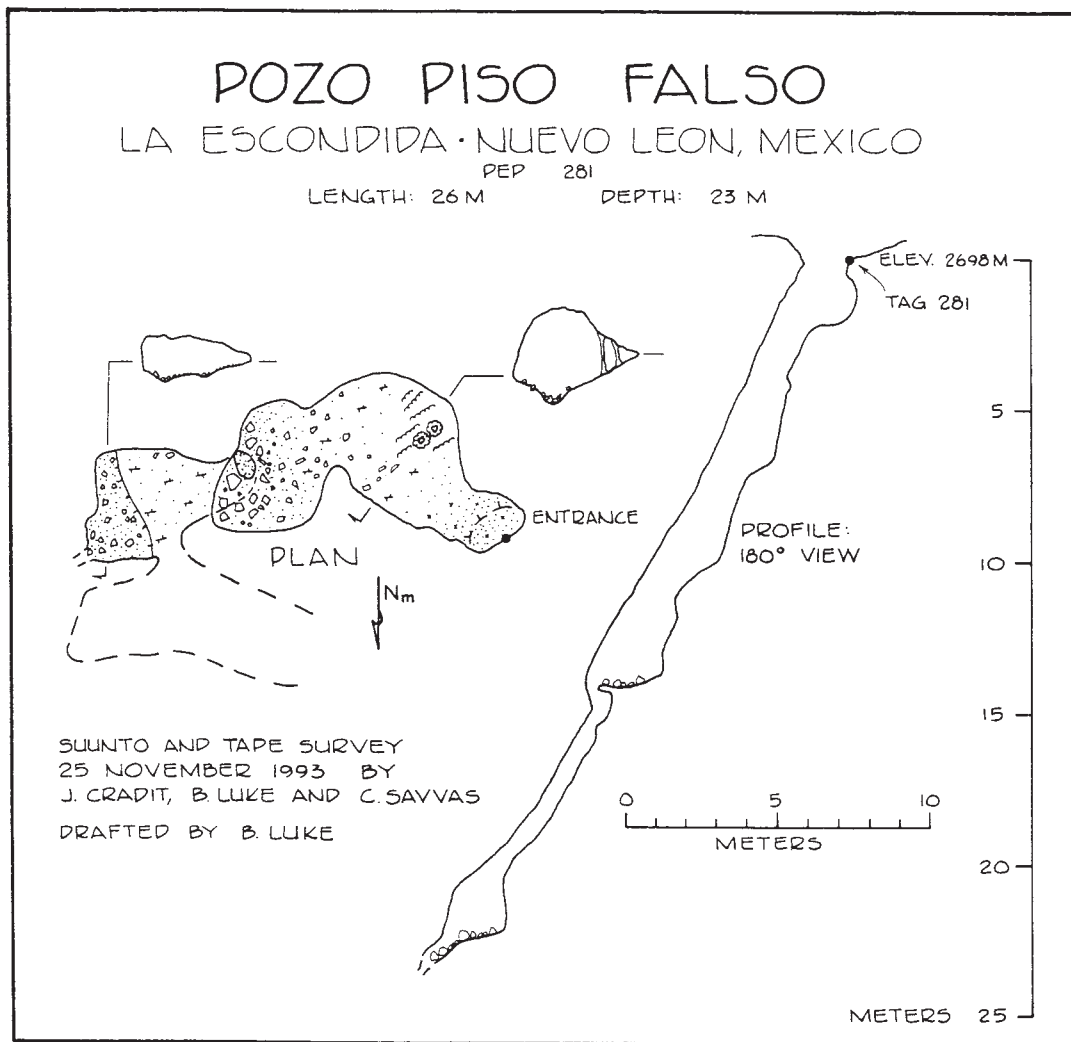
- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| 166. Cueva de los Frijoles          | 196. Pozo de la Nopalera            |
| 169. Sótano de La Escondida         | 187. Cueva Humada                   |
| 170. Sótano del Jilguero            | 188. Cueva de la Forja No. 1        |
| 171. Cueva de El Viejo              | 192, 193. Cueva de la Forja No. 2   |
| 172. Sótano de Escargot             | 242. Pozo Repisa                    |
| 173. Sótano de Sabado               | 251. Pozo Cedro                     |
| 174. Sótano de los Tres Pajaritos   | 252. Cueva Contacto                 |
| 175. Sótano del Abrazo de Alonzo    | 253. Cueva Microsalamanquesa        |
| 176. Sótano Triángulo               | 254. Pozo de las Amapolas           |
| 177. Sótano del Alaud               | 255. Pozo del Calvario              |
| 178. Sótano T                       | 256. Pozo de Lucino                 |
| 179. Sótano del Hongo               | 257. Pozo de la Mesita de Yerbaniz  |
| 180. Sótano del Sarro Blanco        | 258. Pozo de la Rincón de la Virgen |
| 181. Sótano del Mono                | 259. Pozo con Huevos                |
| 182. Cueva del Soyate Viejo         | 260. Pozo de los Pateros            |
| 183. Pozo del Primero de Septiembre | 278. Pozo Velocriptor               |
| 184. Pozo de El Niño                | 279. Cueva de San Juan              |
| 185. Cueva del Mono                 | 280. Cueva del Tenedor              |

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| 281. Pozo Piso Falso              | 301. Pozo de las Salamanquesas Lentes |
| 284. Pozo Nido de la Rata         | 304. Cueva de Más Cable               |
| 285. Pozo Divertoso               | 305. Cueva Huevón                     |
| 286. Cueva Brontosauros           | 306. Pozo Cubierto                    |
| 288. Pozo Guajalote               | 314. Pozo Antes de Cenar              |
| 289. Pozo Aereo                   | 331. Pozo Reina de Cobre              |
| 290. Pozo de El Chorreadero       | 332. Pozo Trabajoso                   |
| 294. Sótano de la Hoya del Pájaro | 333. Cueva del Tesoro de Clifofas     |
| 298. Cueva del Machete Volando    |                                       |





A deviation keeps Charley Savvas free in Pozo Piso Falso. 1993 photo by Peter Sprouse



**POZO NIDO DE LA RATA**

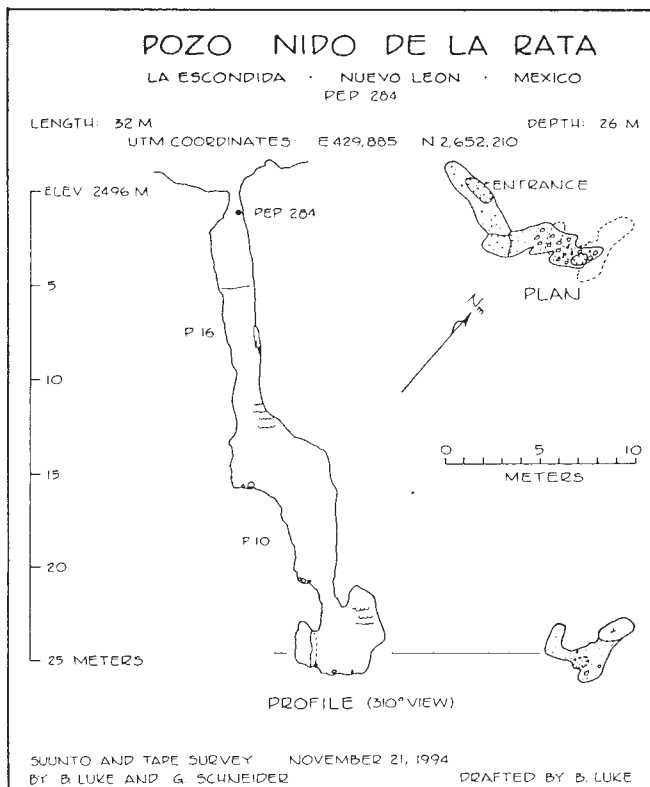
La Escondida, Nuevo León  
 Length: 32 meters Depth: 26 meters  
 UTM coordinates: E 429,885 N 2,652,210

PEP 284

Pozo Nido de la Rata is located 500 meters east-southeast of La Escondida in a drainage at 2496 meters elevation. The entrance drop is 16 meters, with another 10-meter drop to the floor. Below a squeeze is a

small room with a dogleg that is flowstone-choked. This pit was explored and mapped on 21 November 1994 by Barbara Luke, Rachel Savvas, Glen Schneider, and Cathy Winfrey. (BL)

Spiders: Araneomorphae undetermined  
Millipedes: Xystodesmidae genus and species



**POZO DIVERTOSO** PEP 285

Hoya del Muerto, Nuevo León  
Length: 52 meters Depth: 30 meters  
UTM coordinates: E 430,230 N 2,647,490

Pozo Divertoso is located 2200 meters north of El Muerto at 2560 meters elevation. It is about 50 meters south of Pozo Trabajoso. It has a 22 meter entrance drop beneath a small headwall. This narrow drop bells out into a wide room with a nearly flat floor of dirt and rubble. The walls are flowstone covered. There are two small leads, neither with airflow. This pit was explored on 22 November 1994 by Susie Lasko, Barbara Luke, and Scott Scheibner. (BL)

Ground beetles: Trechinae genus and species (troglomite)

**CUEVA BRONTOSAURUS** PEP 286

Agua del Toro, Nuevo León  
Length: 46 meters Depth: 25 meters  
UTM coordinates: E 431,783 N 2,649,580

This cave is located 300 meters west of Agua del Toro, at an elevation of 1890 meters. It has a large shelter-like entrance, the home of an owl, beneath a 10-meter-high headwall. The entrance takes an arroyo,

and there is water at the back. The floor is breakdown covered, and the bedrock is primarily dark-colored limestone marbled with calcite. There is no mud, and no airflow at the back. A low wet belly crawl at the back was not pushed. This cave was located using air photos in November 1993 by Jon Cradit, Paul Fambro, Barbara Luke, Charley Savvas, and Peter Sprouse. It was surveyed one year later by Linda Butler, Susie Lasko, Barbara Luke, and Scott Scheibner. (BL)

**POZO GUAJALOTE** PEP 288

La Escondida, Nuevo León  
Length: 100 meters Depth: 90 meters  
UTM coordinates: E 430,330 N 2,649,975

Pozo Guajalote is situated 100 meters east of Pozo Piso Falso, or 2500 meters south-southeast of La Escondida at 2690 meters elevation. The small pit entrance quickly enlarges into an ample shaft formed on steep east-dipping beds. Ledges break it up into four pitches of 40, 13, 16, and 22 meters. Deep clay plugs the bottom. This pit was explored and mapped on 25 November 1993 by Jon Cradit, Paul Fambro, Barbara Luke, Charley Savvas, and Peter Sprouse. (PS)

**POZO AEREO** PEP 289

La Escondida, Nuevo León  
Length: 20 meters Depth: 15 meters  
UTM coordinates: E 430,450 N 2,650,290

This pit is located in a pass 2500 meters south-southeast of La Escondida, at 2730 meters elevation. The entrance measures 10 by 12 meters and was spotted on aerial photos. It is a 10 meter drop to a vegetated breakdown floor, with an alcove off the west side. Pozo Aereo was explored and surveyed on 26 November 1993 by Jon Cradit, Charley Savvas, and Peter Sprouse. (PS)



**POZO DE EL CHORREADERO** PEP 290

La Escondida, Nuevo León  
Length: 99 meters Depth: 55 meters  
UTM coordinates: E 426,658 N 2,651,380

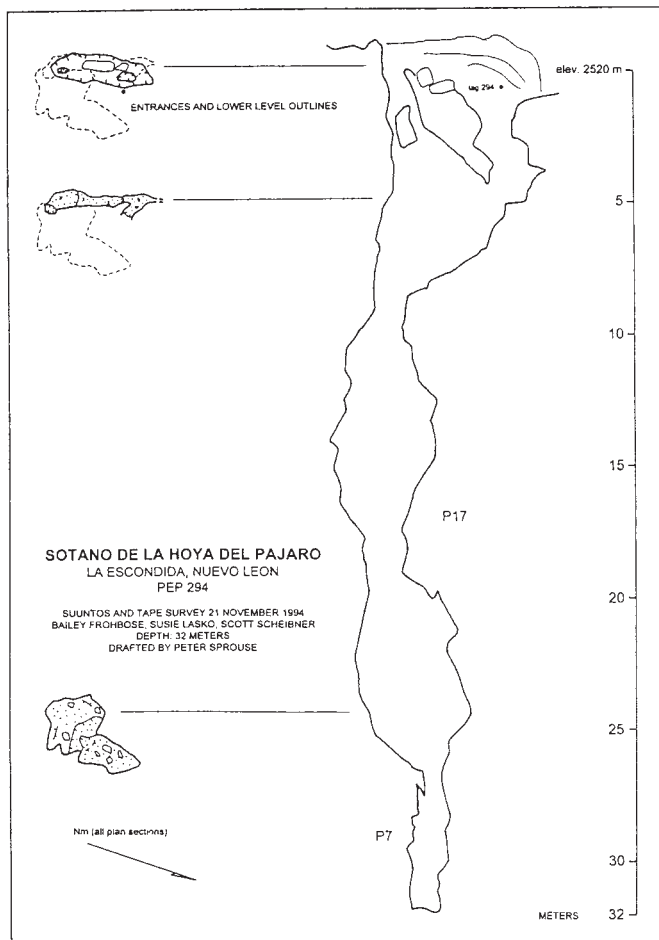
This pit is situated at the base of the south cliff face of Cerro el Viejo at 2500 meters elevation. It is located 1500 meters northwest of Las Trojas. There is a 5-meter climb to get into the entrance, where it immediately

drops 25 meters to a ledge. At that point the cave splits into two parallel shafts which don't reconnect. The eastern shaft, directly below the entrance pit is 25 meters deep. The western shaft is 16 meters and also blind, but a traverse across the top leads to a third pit that is climbable down to a pinch. This pit was mapped on 27 November 1993 by Barbara Luke, Charley Savvas, and Peter Sprouse. (PS)

Leeches: Hirudinea undetermined  
 Spiders: Araneomorphae undetermined  
 Centipedes: Lithobiomorpha undetermined  
 Millipedes: Diplopoda undetermined  
 Cave crickets: Rhabdophoridae genus and species (trogloxene)  
 Darkling beetles: Tenebrionidae genus and species (?troglophile)

**SOTANO DE LA HOYA DEL PAJARO** PEP 294  
 La Escondida, Nuevo León  
 Length: 40 meters Depth: 32 meters  
 UTM coordinates: E 429,720 N 2,651,350

This pit is located 1100 meters south-southeast of La Escondida at an elevation of 2520 meters. There are two small entrances in a breakdown-filled sink. The one enterable hole drops down to a slope leading to a 17-meter drop. Another pitch of 7.5 meters ends on a mud floor which sounded hollow. There was no airflow or openings in the floor. The cave was explored on 21 November 1994 by Bailey Frohbose, Susie Lasko, Scott Scheibner, and Peter Sprouse. (SL & PS)

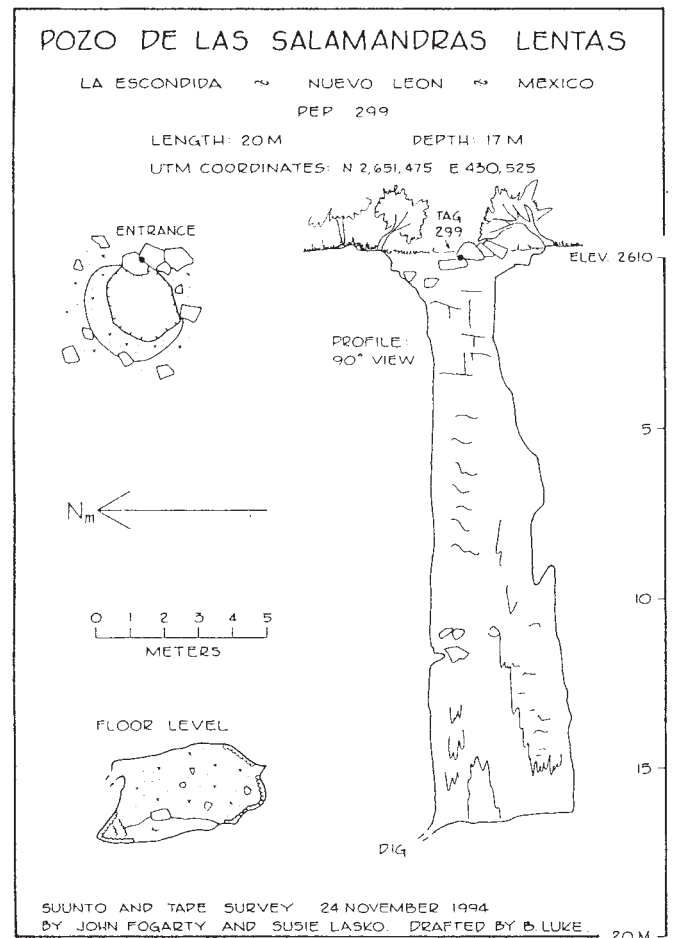


**CUEVA DEL MACHETE VOLANDO** PEP 298  
 La Escondida, Nuevo León  
 Length: 130 meters Depth: 70 meters  
 UTM coordinates: E 428,550 N 2,653,235

Cueva del Machete Volando is situated high on the east cliff face of Cerro el Viejo at 2960 meters elevation, making it the highest cave that has been explored in the Purificación Karst Region. The entrance, 10 meters wide and 20 meters tall, can be seen from La Escondida, 1200 meters to the southeast. Access to the cave involves considerable climbing and rigging. Thirty meters inside, the cave widens into a large chamber, dry and dusty. Two blind pits at the back give the cave an overall vertical extent of 70 meters. The cave was reached on 23 November 1994 after several days of climbing, highlighted by a falling machete. (PS)

**POZO DE LAS SALAMANDRAS LENTAS** PEP 299  
 La Escondida, Nuevo León  
 Length: 20 meters Depth: 17 meters  
 UTM coordinates: E 430,525 N 2,651,475

This pozo is located 1500 meters southeast of La Escondida, at an elevation of 2610 meters. It is in the middle of a large, flat-floored sink. At the bottom of the 16 meter drop was a potential dig where rocks rattled down another 3-6 meters. This pit was mapped on 24 November 1994 by John Fogarty and Susie Lasko. (PS)





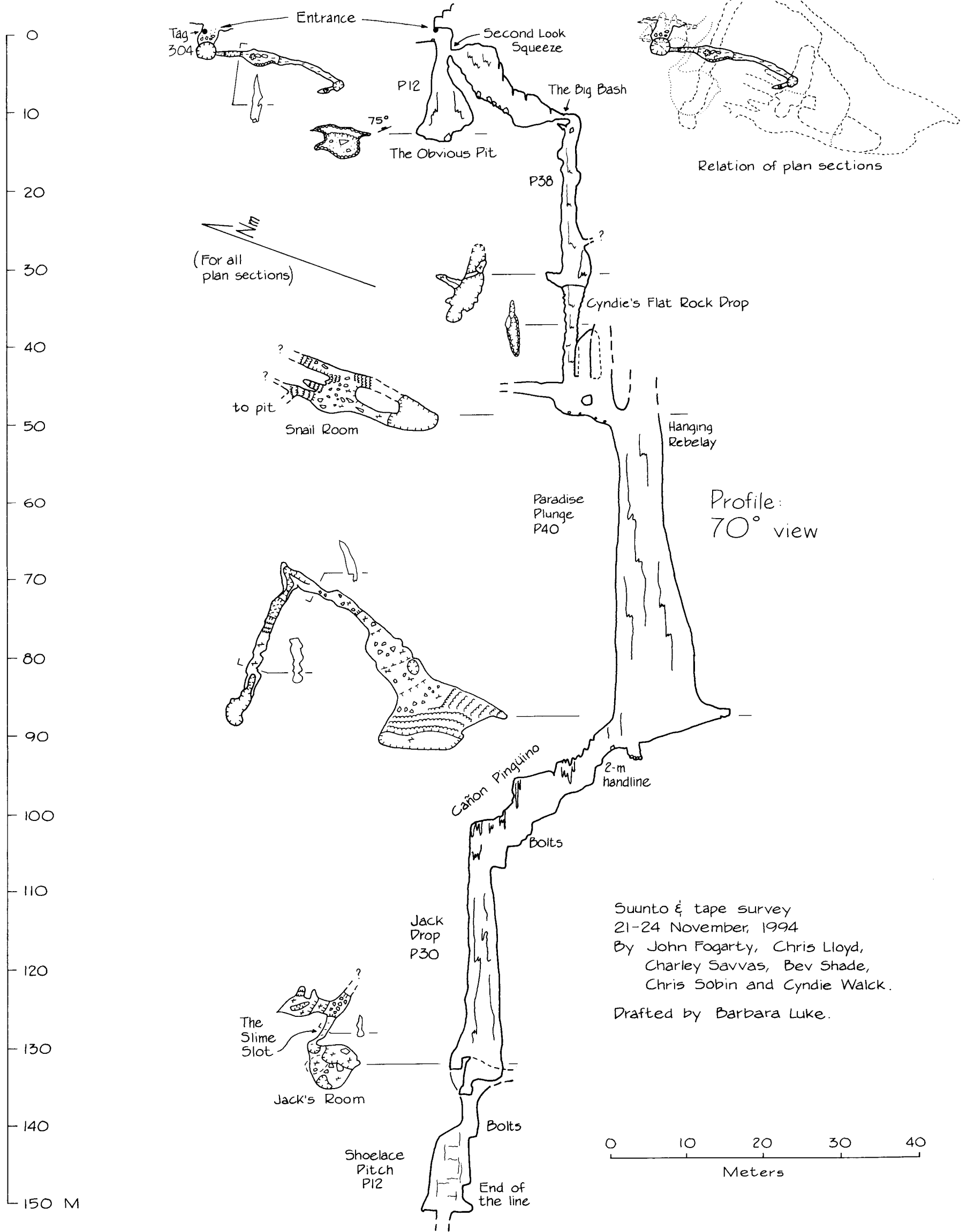
# Cueva de Más Cable

La Escondida, Nuevo León, México

UTM Coordinates E 429,810 N 2,652,350

Length: 200 M      Depth: 151 M      Elevation: 2550 M

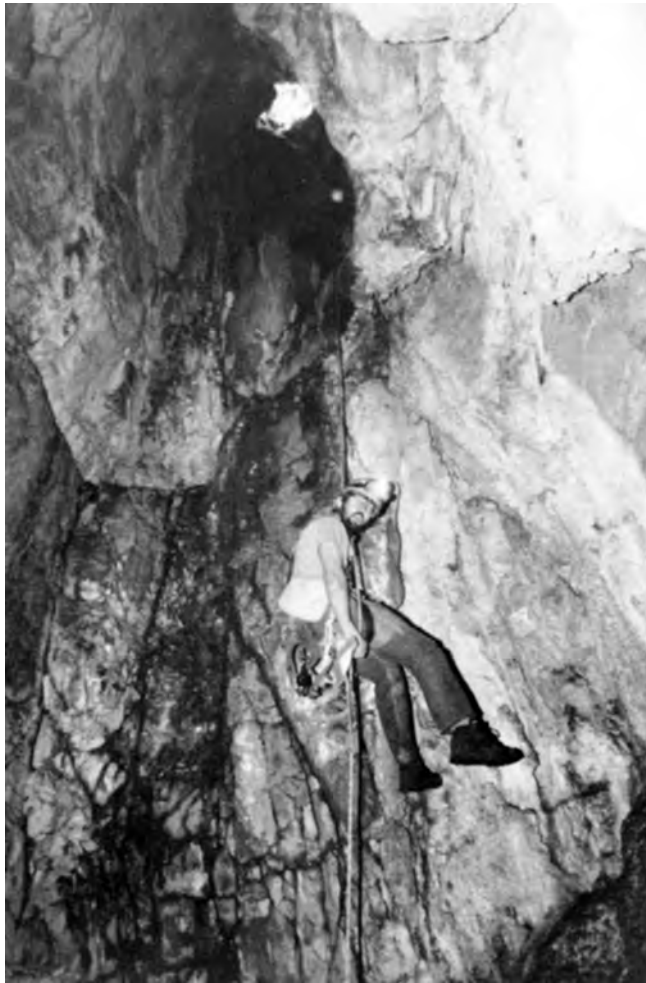
~ PEP 304 ~



Profile:  
70° view

Suunto & tape survey  
21-24 November, 1994  
By John Fogarty, Chris Lloyd,  
Charley Savvas, Bev Shade,  
Chris Sobin and Cyndie Walck.  
Drafted by Barbara Luke.





John Fogarty in Pozo de las Salamandras Lentas. 1994 photo by Susie Lasko

**POZO DE LAS RATAS BRAVAS** PEP 301  
 La Escondida, Nuevo León  
 Length: 40 meters Depth: 24 meters  
 UTM coordinates: E 430,662 N 2,651,545

This pit is situated 100 meters northeast of PEP 299, at 2610 meters elevation. The initial 8-meter drop slopes down to a second pitch of 10 meters, below which the cave ends. It was mapped on 24 November 1994 by John Fogarty and Susie Lasko. (PS)

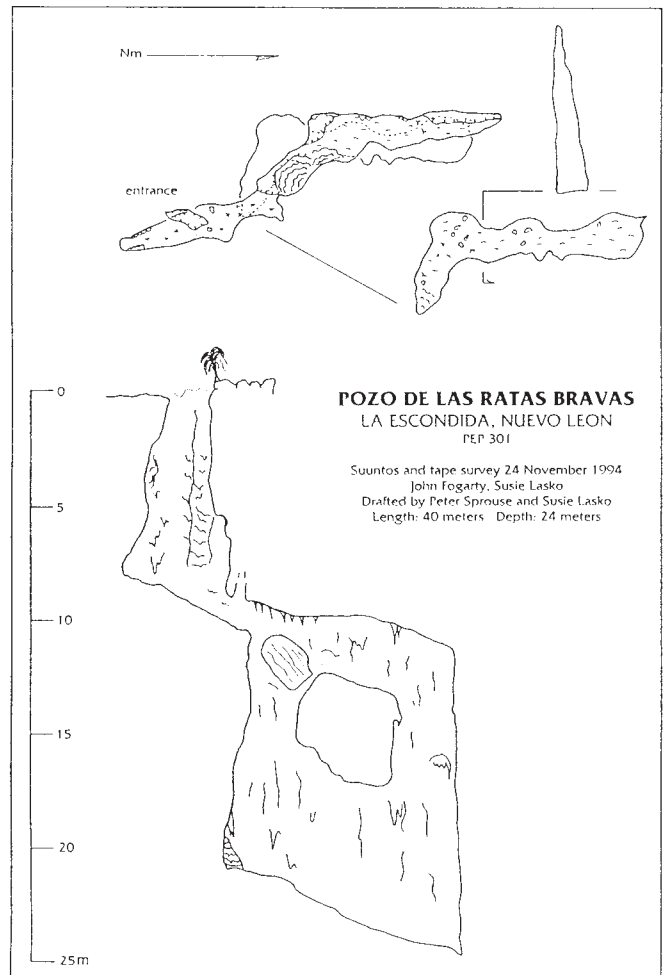
**CUEVA DE MAS CABLE** PEP 304  
 La Escondida, Nuevo León  
 Length: 200 meters Depth: 151 meters  
 UTM coordinates: E 429,810 N 2,652,350

Cueva de Más Cable is located on a ridgetop 400 meters east of La Escondida, at an elevation of 2550 meters. The small horizontal entrance leads immediately to the first pitch, the Obvious Pit. It is 12 meters deep and blind, but has a window on the far side that goes down a slope to a constriction. This gives access to a 38-meter pit, Cyndie's Flat Rock Drop. Next comes Paradise Plunge, a 40-meter shaft. Then follows Cañon

Pingüino, which descends to Jack Drop, a 30-meter pitch. Shoelace Pitch, 12 meters, reaches the bottom at minus 151 meters.

Bev Shade, Chris Sobin, and Cyndie Walck discovered the entrance to this cave on 21 November 1994. It was explored and surveyed over the next four days. In the process Cyndie took rockfall on the shoulder, but still returned the following day to cave with her arm tied up in a sling. (PS)

Scorpions: *Vaejovis rossmani* Sissom (troglophile)  
 Harvestmen: Laniatores undetermined  
 Cave crickets: Rhabdiphoridae genus and species (troglaxene)



**CUEVA HUEVON** PEP 305  
 Agua del Toro, Nuevo León  
 Length: 42 meters Depth: 28 meters  
 UTM coordinates: E 432,755 N 2,649,550

Cueva Huevón is 800 meters east-northeast of Agua del Toro, at 1730 meters elevation. It pirates drainage from a short karst valley that formerly fed nearby Cañon el Infierno. A road dead-ends at the entrance, which is a short climbdown into a small breakdown room. A squeeze then opens into the first drop of 4 meters. At the bottom of a rubble slope is another constriction into the second pitch, 12 meters. This lands in a spacious chamber that slopes rockily

down to a silt fill. Discovered in November 1993 by Peter Sprouse, it was mapped a year later by him, Glen Schneider, and Cyndie Walck. As they left the cave in a heavy rain, the cave began to take water. (PS)

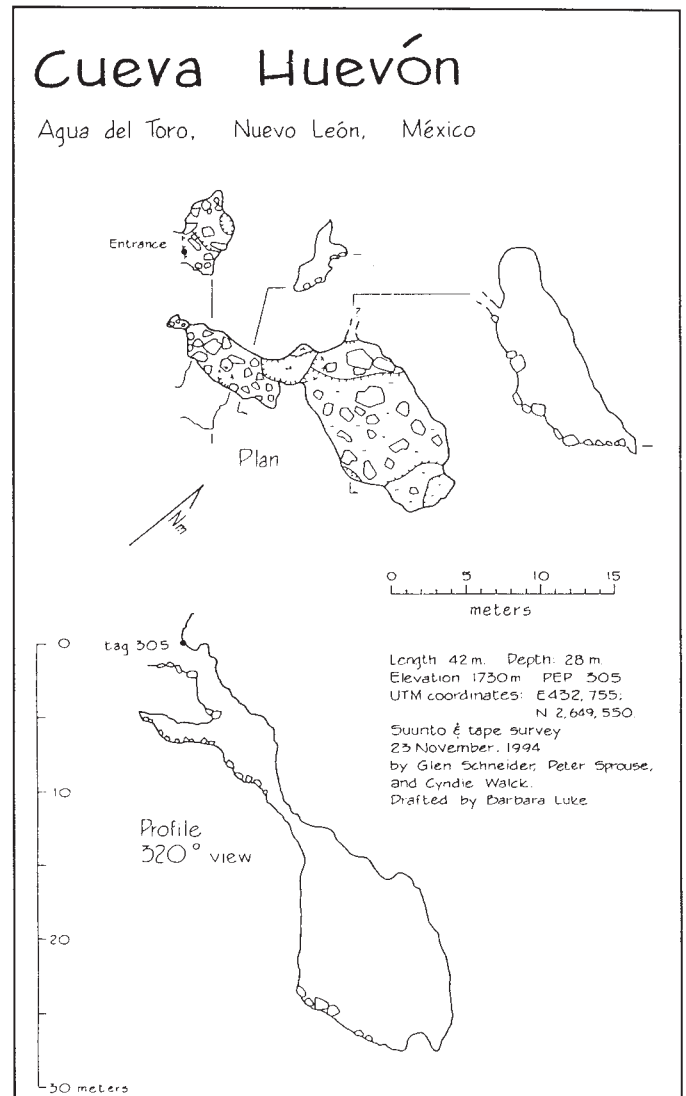
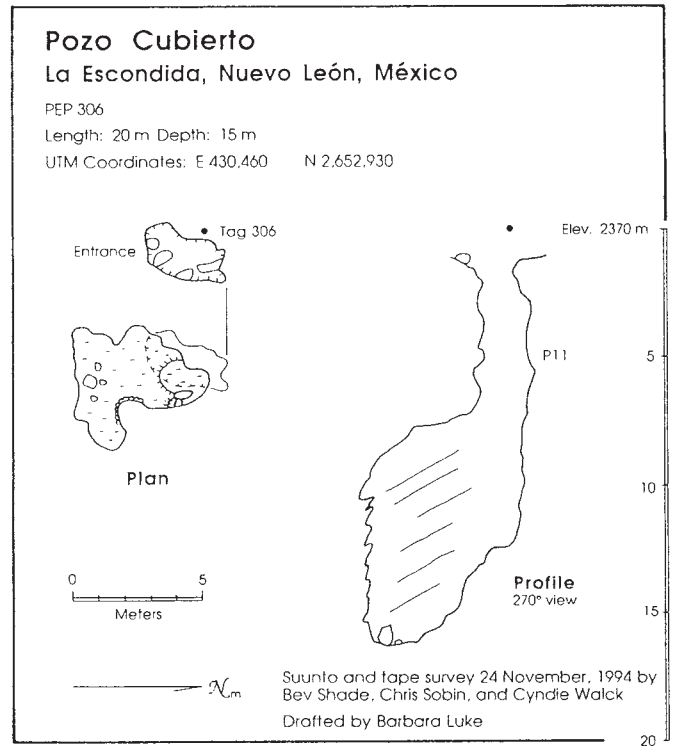
- Ground Isopods: Trichoniscidae genus and species (troglomite)
- Spiders: Araneomorphae undetermined
- Pseudoscorpions: ?*Dinocheirus* sp. (?troglophile)
- Harvestmen: Sclerosomatidae genus and species (troglaxene)
- Millipedes: Pyrgodesmidae genus and species (troglophile)
  - Rhachodesmidae genus and species
- Insects: Insecta larvae undetermined
- Cave crickets: Rhabdophoridae genus and species (troglaxene)
- Beetles: Coleoptera undetermined
  - Trechinae genus and species (troglomite)
  - ?*Mexisphodrus* sp. (?troglomite)



John Fogarty sketching in Pozo de las Ratias Bravas. 1994 photo by Susie Lasko

**POZO CUBIERTO** PEP 306  
 La Escondida, Nuevo León  
 Length: 20 meters Depth: 15 meters  
 UTM coordinates: E 430,460 N 2,652,930

Pozo Cubierto is situated 1200 meters northeast of La Escondida, at an elevation of 2370 meters. The entrance, partly obscured by undergrowth, drops 11 meters into a silt-floored room. Discovered in 1992, it was explored on 24 November 1994 by Bev Shade, Chris Sobin, and Cyndie Walck. (PS)



### POZO ANTES DE CENAR

PEP 314

La Escondida, Nuevo León

Length: 45 meters Depth: 37 meters

UTM coordinates: E 429,405 N 2,651,830

This pit is in the sink used by the PEP covers as a base camp, 600 meters south of La Escondida at 2550 meters elevation. The entrance, plugged with logs and rocks, was opened to reveal a 37-meter blind pit. Glen Schneider led the digging of this on 24 November 1994, and it was surveyed by Bailey Frohbose, Barbara Luke, and Charley Savvas. (PS)

### POZO REINA DE COBRE

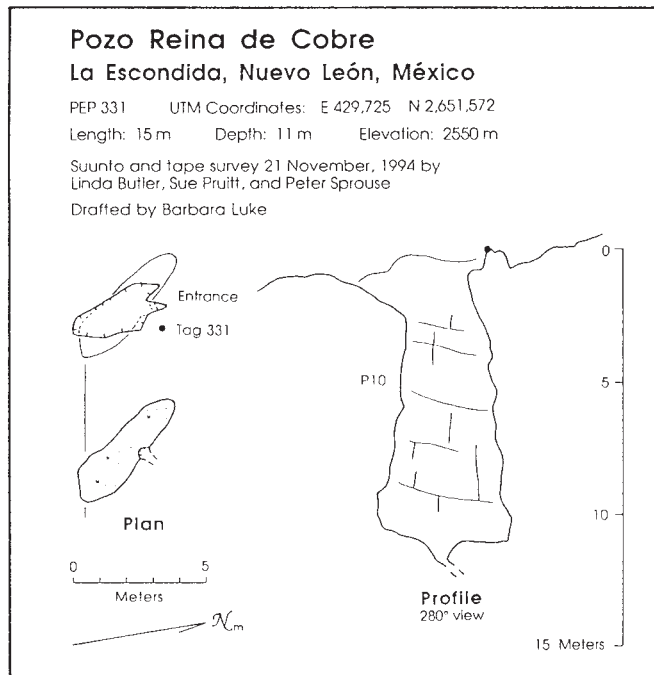
PEP 331

La Escondida, Nuevo León

Length: 15 meters Depth: 11 meters

UTM coordinates: E 429,725 N 2,651,572

This pit is located 850 meters south-southeast of La Escondida, on the north side of a cirque-like karst valley at 2550 meters elevation. The entrance measures 1.5 by 3 meters, and is an 8 meter sheer drop to a floor of organic debris. A tiny drain goes down another 30 centimeters, but is plugged. This pit was located in October 1987 by Jim Feely, Susie Lasko, Peter Sprouse, and Allan Cobb. It was explored on 21 November 1994 by Linda Butler, Sue Pruitt, and Peter Sprouse. (PS)



### POZO TRABAJOSO

PEP 332

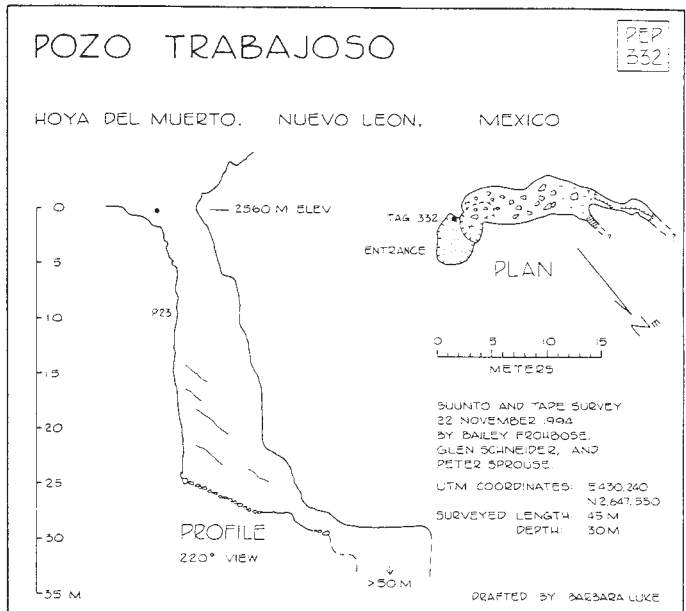
Hoya del Muerto, Nuevo León

Length: 45 meters Depth: 30 meters

UTM coordinates: E 430,240 N 2,647,550

This pit is located 2200 meters north of El Muerto, at an elevation of 2560 meters. It is along a trail 50 meters north of Pozo Divertoso. The entrance pit drops 23 meters into a sloping passage. This narrows to a crawl

with an awkward squeeze into the second pitch. This is a narrow rift estimated to be about 50 meters deep. About 12 meters down it becomes very narrow and would be difficult to rappel through. There is airflow in the crawl at the top of the second pitch. Pozo Trabajoso was explored on 22 November by Bailey Frohbose, Glen Schneider, and Peter Sprouse. The name was inspired by the difficulty in setting bolts while bridged over the second pitch. (PS)



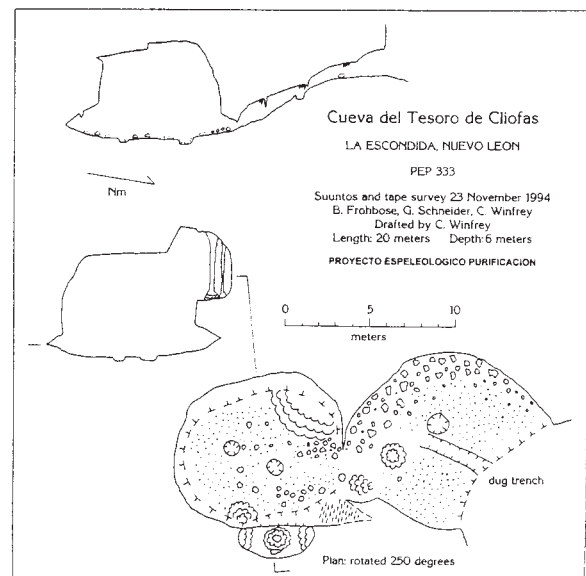
### CUEVA DEL TESORO DE CLIOFAS

PEP 333

La Escondida, Nuevo León

UTM coordinates: E 429,852 N 2,652,080

This cave is situated 500 meters southeast of La Escondida, at 2535 meters elevation. It has a low, wide entrance on a hillside with a trenched floor. Seven meters down a slope the cave opens into a room 7 meters across and 6 meters high. Local resident Cliofas Rosales is convinced that the cave holds treasure. Bailey Frohbose, Glen Schneider, and Cathy Winfrey mapped the cave on 25 November 1994.



# CALENTURAS 1995

by Susie Lasko



*Martha Mefferd illuminates the stream in Cueva del Río Corona near Water Bison Falls. 1995 photo by Susie Lasko*

The road dropped from sight as the hood of the truck rose to climb the steep hill in the Sierra Madre Oriental. It was great to be back in the mountains. The temperature was starting to cool with the climb in altitude. Suddenly, the front of the truck sank with a hard bump, lifted up again, lurched sideways and came to a halt. With wide eyes, the passenger said, "Don't let the truck move an inch." It seemed that the right front tire had gone in and out of a badly washed-out spot in the road and was straddled on either side it. It would be accurate to say that it was the very LAST parking spot before rolling off the mountain.

With the winch on Charley Savvas's Scout as a safety line, we were able to cut the wheel as hard as possible and back out of this very precarious situation. WOW, that was close!

We continued our caravan with Charley, Martha Mefferd, Steve Wiswell, and Barbara Luke. Cathy Winfrey's Toyota carried Jody Horton, Peter Sprouse, and me. Jon Cradit left Austin earlier than the rest of the group with Pat Geery, Ben Milford, and Bev Shade.

With the adrenaline from the "edge" experience subsiding nicely, we realized the Charley's truck was not following. Walking back down the road we found that the Scout's low range had gone out. Carefully backing the Toyota down the road we again hooked the two vehicles together with the winch cable and aided the Scout up the grade. We left it and some of its crew in the village of Los San Pedros and proceeded on to Yerbabuena to meet up with Cradit's crew. After unloading Cathy's truck, Charley drove it back to Los San Pedros to get his crew and gear. A few hours later we were all together around the campfire planning our first day of caving, which would come after a well-deserved full night of sleep.

Sótano de las Calenturas is a large and complex cave located near the headwaters of the Río Corona. It had been surveyed to a length of 7730 meters, and a major goal was to try to connect it to its presumed resurgence, Cueva del Río Corona. So we geared up for a big trip into Calenturas, ten out of the twelve of us. At the entrance Peter installed a bolt and a thread

for freehang rigging. While the others were rappelling in, Charley and Peter checked a blowing rift off of Kingdom Kong. Charley squeezed down through the rift for 5 meters to a hopelessly tight drop. They tossed the lead flag found at the bottom from 1979 on down and returned to the entrance hall. Since cavers were still coming in, some of us went to look at Lake Louise and found it low enough to wade. Peter and Charley checked it out, and at the far end of the Blazer Borehole discovered the Blazer Sump was open for as far as could be seen.

With the crew assembled, everyone proceeded down towards the Thanksgiving Thruway. Bev, Jody, and Peter did the traverse across the pit at the end of the Thruway, thanks to nice rigging installed by Charley and me. They looked at a dig that Dale Pate had noted off of Good Intentions back in 1979. It was taking air, so they lowered the mud floor and got through. It quickly led to another dig which Jody and Peter worked on for awhile, but it needed bang. Susie, Jon, and Charley rigged the drop down to Turkey Sump. Charley swam around but couldn't find anything new. Barbara, Pat, Steve and Martha decided to do the resketch/resurvey of the Bay Scallops Passage, which made them the last ones out of the cave with a job well done.

The next day we planned to do a wetsuit trip across Blazer Sump. Persistent rains delayed us until late afternoon. We suited up in the entrance chamber preparing for a long day in the water. At times, as we hiked along the Blazer Borehole, the dive line used by Jim Bowden was over our heads. Unfortunately, the lake sumped again in 50 meters, but Charley found a high-level passage that went. This had been explored by Jim, as evidenced by "4-85" marked in mud on the wall. This passage went up-dip and forked. Bev, Peter, and I mapped to the left, which got named Mister Sister Twister. It went to a junction where Bev explored left in a watercrawl to a "T" intersection, with both ways continuing as bellycrawls. At the junction I pushed to the right in a bellycrawl and up a climb, where I partially squeezed into a dome room. I could see a hole above some flowstone at the top of the dome. This passage had good air. Meanwhile, Barbara, Charley, and Jody had mapped to the right in the Kneeprint Passage. This wound upwards a ways to a long low crawl. They dug awhile at a pinch with air before quitting. As we returned through the Blazer Borehole we noticed new ceiling dribbles as the rains continued on the surface.

The following day we split up into three groups for some surface recon. Two of these groups hiked to the south of El Hundido without finding much. Charley and Bev bounced El Hundido, while Cathy, Jody, Pat, and I went over to dig on a cave we'd noticed for years near La Llorona. We mapped 27 meters into this cave where we were stopped by a muddy pinch with air.



*Charley Savvas does a night climb out of the Calenturas entrance. 1995 photo by Peter Sprouse*

Jon, Ben, and Bev, who had to be back in Austin early, left for a quick trip to Xilitla and the Bird House. The remaining eight of us geared up for a visit to the Corona. Cathy drove us up to the pass where a collapse blocked the road down into the canyon. The spring was flowing well. After the 45 minute hike down to the entrance we quickly proceeded into the cave and up to the Velcro Crawl, where Charley set the charge. It was blowing, so it quickly filled the river chamber with smoke. Jody checked it and we were through. Charley and Pat went ahead to push while Peter, Barbara, and Steve surveyed up the crawl. And a serious crawl it was, about 60 meters of flat-out bellycrawl. Just as the survey team fizzled out, Charley came back reporting big passage ahead. He and Peter continued surveying up to where Pat waited. Pat headed back to accompany Steve out.

At a "T" intersection the survey continued for several hundred meters to the south in the direction of Calenturas. There were several leads off of this passage which went to a watercrawl. The survey ended for the day and everyone headed out of the cave to find Martha, Jody, and me, who had been

taking photos, outside the entrance with a nice fire. Dawn was breaking as we hiked up the hill. Cathy met us as we stumbled up towards camp. The day was spent eating and sleeping.

We were excited about the new passage we had found in the Corona, so Peter, Charley, Barbara, and I prepared to return. Jody and Pat went into Calenturas to de-rig. Martha, Steve, and Cathy hiked up toward Puerto el Oso and found a 15-meter-long decorated crawl. Meanwhile, our Corona crew made good time back to the new section. Barbara and I went south and into a lefthand lead that Charley had explored to a "T". We mapped south in a small stream we named Nickel Creek, for a ways to a small sump. An upper level flowstone choke took good air. Peter and Charley went north to blast a dam where Charley noticed audible wind. They shot it and Charley slithered ahead into a pool where he set about hammering. Peter explored in a north lead that Charley said went to a 5-way junction. Charley's windy lead needed a lot more work, so the last charge was used to try to lower the pool level for future access. They began to survey back, which involved a long muddy crawl, giving way to walking passage and loops. They met up with Barbara and me and headed out. This time, our hike back was in the dark. We reached camp at 4 a.m.

With all of our caving days used up, we loaded up the truck and lined up for a group photo. Our one vehicle took everyone's gear and was sent on to Los San Pedros, while seven of us hiked there. After a nice

meal in la casa de señora Torres, we loaded up the Scout and headed down to the river, stopping now and then to cool Charley's brakes.

By the time we reached the highway we were all ready for a good meal, and found one at a new 24-hour restaurant called La Moderna. We paid a short visit to Los San Pedros residents Gabino and Yolanda, who are working in Victoria, and continued on to the centro to get rooms at the Hotel Sierra Gorda. Here we found the bar, and a lounge act that defies description. Leave it to say that we laughed a lot and got out of there as quickly as possible. We were still talking about it as we headed north for home.



*Susie Lasko swims across the Blazer Sump in Calenturas. 1995 photo by Peter Sprouse*

## PEP MEMBERSHIP LIST 1995

Tony Akers  
 Bob Anderson  
 Wayne Bockelman  
 Don Broussard  
 Jim Coke  
 Don Coons  
 Paul Fambro  
 Jim Feely  
 Bill Feely  
 Mike Futrell  
 Terry Gregston

Daniel Hogenauer  
 Ray Keeler  
 Jack Kehoe  
 Troy Lanier  
 George Love  
 Barbara Luke  
 David McKenzie  
 Jim McLane  
 Greg McNamara  
 Joe Oliphant  
 Dale Pate

James Reddell  
 Dawn Reed  
 Charley Savvas  
 Terry Sayther  
 Bev Shade  
 John Stembel  
 Tim Stich  
 George Veni  
 Harry Walker  
 Jack White  
 Cathy Winfrey





## The Six Plagues of El Morro Canyon

**DATE:** July 1995

**DESTINATION:** Río Purificación

**PERSONNEL:** Charles Fromén, Carl Phillip Fromén,  
Jesse Coleman and Tim Jones.

**REPORTED BY:** Tim Jones

At 1 a.m. Friday night we encountered the first plague. We were at our normal rest area just south of Refugio, on our way to the Purificación area of the eastern Sierra Madre. We had camped in this spot on previous trips. This night, however, it was inhabited. As soon as we stepped out of the car, the stinging darkness enveloped us. Our previously comfy sleeping spot was now a South Texas mosquito swamp.

Our crew weathered the night, not knowing it was only the front lines of a series of plagues. Our destination was a little canyon downstream from Cueva de Infiernillo called El Morro Canyon, a tributary of the Río Purificación. A couple years before, we had explored up the main Purificación canyon, also called Hervores Canyon, and had discovered the spectacular Nacimiento de Hervores. It is a beautiful series of waterfalls cascading 60 meters down bell canopies, and then another 25 meters into a plunge pool. The spring comes out among large boulders in a small cave, which unfortunately sumps 5 meters inside the entrance. We hoped to find an even more beautiful resurgence, with more cave passage, in El Morro.

Saturday night we camped at Paso de la Muerte and headed down the next day into Infiernillo Canyon. We expected to spend five nights backpacking, exploring down Infiernillo/Purificación and then up El Morro. Following our previous style of travel, in addition to our normal backpacking and caving gear we each were carrying a small inflatable boat. The boats have proven to be an effective way to travel in the steep-walled canyons when they fill up with water.

From our car, it took us a couple of hours to bottom Infiernillo canyon. Normally running, the canyon was completely dry. This did not bode well, for we were counting on using the rivers for our water supply. Our discussion of whether we thought we would find water downstream was cut short by loud rumblings in the

sky, and soon we were scrambling to set up a shelter from the downpour. Our second plague. It was followed quickly by the third - under our dripping shelter we found ourselves covered with ticks. Finding and disposing of them gave us something to do while we waited out the storm.

A couple of hours later the storm had subsided, and we decided to see if we could make it a ways down the canyon. The rain had moistened the valley, but not enough to make it really slippery. The hiking was surprisingly easy, and we camped in the middle of the riverbed that night.

The next day we made it to the junction with the Río Purificación, and it was running strong. After a bath and a rest, we continued downstream. Shortly after the junction, the river disappeared into the gravel floor of the canyon. On the other side of a bend, it reappeared at a spring, and then quickly filled the canyon up wall to wall with a big pool. Time for the boats.



*Rafting by an anticlinal shelter on the Río Purificación. 1995 photo by Tim Jones*

It is hard to describe the feeling of floating peacefully downstream in a pristine Mexican canyon walled with sheer cliffs hundreds of meters tall. The water is clear to the bottom 10 meters below, big fish swim lazily by, wild turkeys squawk and flap noisily down-

stream. It doesn't take long to forget about city life and rush hour traffic.

We camped in the Purificación canyon that night, and were tried again. As we set up camp, a large swarm of bees settled in. They covered everything, including us. It was quite unnerving, but they were not malicious. We moved slowly and tried to ignore them crawling on us. We all got stung at least once when an exploratory bee would crawl up a shirt sleeve and get pinched. The only way to get away from them was to stay inside our tents or underwater. At dusk, the bees disappeared, but were right back at sunrise. We packed camp quickly and were glad to leave them behind.

That afternoon we finally reached the junction of El Morro Canyon. It was beautiful. More narrow than the canyon we were traveling in, it carried just as much water at an approximate ten degree cooler temperature. This seemed to be a good sign for a resurgence. The fifth plague arrived in the form of many butterflies. Unlike bees, however, being surrounded by fluttering butterflies was sort of pleasant.

We headed up El Morro Canyon, and by climbing around and wading through pools, we were able travel a couple of kilometers before we needed our boats again. The water seemed a little silty, and we wondered what this could mean. The canyon became extremely narrow and twisty, and the walls came together until they were about three meters apart. It was dark and steep, and we encountered the first of several waterfalls. It was difficult to figure out how to pass the waterfalls without getting washed away or dropping our gear into the froth. Each one posed a challenge to climb, and we slowly moved up stream. In addition, the water was very cold and none of us had brought a wetsuit. Late in the afternoon we encountered what appeared would be the trip ending obstacle - a waterfall plunging out a narrow, twisting chute and rumbling into the side of a plunge pool a few meters below. There were tall cliffs on all sides. How could we ever climb that?

We found a narrow ledge to camp on for the night. It was the end of our third day and our halfway point. Even if we could make it past this obstacle, we had only come halfway up El Morro. Emotionally, we resigned ourselves to having to return on another trip.

The next morning I decided to climb up a rock slide as far as I could to at least get a look at the area, and Carl Philip and Jesse decided to at least try to climb the waterfall. They were able to climb up to the right where the water poured out of the slot, but could not find a way to climb into it. I found a narrow ledge by which to climb horizontally until I was just over the top waterfall. Not having a rope, I lowered a long vine to Carl Philip, who tied a rope on the end. When that was anchored, all three of us were able to make it past the waterfall chute.



*Jesse Coleman wades up the cataracts of El Morro Canyon. 1995 photo by Tim Jones*

Excitement was running high, even though Charles was waiting for us to come back so we could pack up camp to head back. The three of us decided to go upstream a ways to see what it looked like. A little ways up, I slipped and cut my foot badly. I turned back, but the other two continued for a ways. After a dozen plunge pools or so the canyon seemed to get less steep as it continued, but its invitation to explore had to be left behind for a return trip. If it was going to take us as long to get back to the car as it took to get here, plus going upstream most of the way, we needed to turn back.

To our surprise, the trip back to the car took only a day and a half - only half the time it took coming in. On the way out of El Morro, the water level was much lower. In fact, the last half kilometer of the El Morro stream completely disappeared and then appeared in a spring at the junction with the Purificación. Clearly it had been in some sort of flood stage on the way in. Before we headed back up the Purificación, we went downstream to see the junction with Infierno Canyon. Infierno is a long and spectacular canyon which comes in from the west, no doubt fed by springs below El Viejo. Earlier Peter Sprouse had led a trip to explore its beginnings in the west. At the junction, it carried as much water as the Purificación, and looked wild and beautiful. It will be an interesting canyon to explore.

As we traveled back up the Purificación, places that had been dry on the way in were now filled with water. Clearly it was surging, two days behind El Morro. The higher water caused us to negotiate through the brush more than we had planned, and three out of the four of us finally succumbed to the sixth plague - poison ivy. It had taunted us the entire trip, but here became almost unavoidable. It had its vengeance on us during the ensuing weeks.

On this trip we failed to find the springs in El Morro Canyon, yet we now know a lot more about the area. Even as this is written a return trip is planned. An attempt to explore the canyon from the other end will be made, starting from some small villages high in the mountains. We eagerly anticipate what we might find.

# Lost in the Confusion Tubes

**DATE:** April 22-30, 1978

**DESTINATION:** Cueva de Infiernillo, Mexico

**PERSONNEL:** Charles Fromén, Mark Shumate, and Mike Connolly

**REPORTED BY:** Mike Connolly

Charles and I picked up Mark in Corpus Saturday morning and camped near the Paso de la Muerte that evening. The next morning the group stopped to visit at Sr. Grimaldo's house and learned that the Austin cavers who had been working at Cueva del Brinco had stopped by on the way to Infiernillo that very morning. We drove to the end of the lumber road, and after waiting for an intense thunderstorm to pass, descended into the canyon and made it into the cave shortly before dusk. The Austin group consisting of Peter Sprouse, Terri Treacy and Sheila Balsdon were quite surprised by the arrival of more cavers at the campsite.

After a good night's sleep the entire group set out on a combined survey and exploration trip down the South Trunk. When the last survey station where previous work had halted was located, we split into two groups with the Austin cavers working the survey while we pushed ahead. Exploration continued past several small lakes through large passage which eventually intersected the Isopod River. Upstream, we reached a point where it was necessary to wade a small lake to continue. Mark elected to wait for the survey team at this point while Charles and I pushed on.

The wade through the stream proved to be fairly short but was a stark reminder of the cold water temperatures in the caves of this region. Past this point exploration continued upstream to a four way intersection where a slight delay was in order so that the passage with airflow could be identified. Continuing on above the stream level, this passage ran for a considerable distance before appearing to end after a sharp upward climb. This route emerged in large upward sloping breakdown passage.

At this point over an hour had passed since wading the stream but the breakdown slope was beckoning. We spent nearly an hour slowly negotiating the rubble before finally reaching the top. The ceiling was as much as 50 meters above the top of the breakdown. The enormous room was dramatically bigger than anything previously encountered in the cave (this is now known as the Netherhall). The gain in elevation in traversing the slope should easily exceed 150 meters. Some time was spent exploring the opposing side of this room for continuing passage. After verifying that the passage continued, the explorers began what was to become a very long trip back to camp.

In the meantime the survey crew had found Mark at the pool, and after waiting for some time decided to begin the return trip. They paused again when they

reached the breakdown maze between the two parallel branches of the main passage, hoping that the remainder of the exploration team would appear. They tired of waiting however, and decided to head back to the base camp.

Charles and I reached the room from which the breakdown maze connects at about 11p.m. This was 13 hours after leaving the base camp and only a short 30 minutes after the survey team passed the same location. At this point considerable difficulty was encountered in locating the crawlway, and about two hours were wasted before it was successfully negotiated. The major obstacle was encountered upon reaching the Confusion Tubes. After missing the turn at the T-intersection an unclimbable drop was eventually encountered. From this point an exhausting process of trying any promising tube while trying to conserve energy and gradually work back up to the T-intersection continued for the next 14 hours.



*Charles and Mike used chalk to try to decipher the Confusion 1992 photo by Susie Lasko Tubes.*

At base camp the remaining cavers woke early to find that the explorers still had not returned. A search team composed of Peter Sprouse and Sheila Balsdon set out carrying extra food to track down the missing cavers. As fate would have it, they passed through the Tubes while Charles and I were still well removed on a false lead. They proceeded to the farthest areas of the cave and by carefully following the tracks of the first explorers eventually determined that they must have returned toward base camp.

Meanwhile the tiresome process of elimination finally paid off when I located a sling used to negotiate a tough spot in the primary tube route. This sling had gone unnoticed when this same route had been checked twelve hours earlier. Elated, relieved and exhausted, the wayward explorers slowly picked their way back to base camp, arriving around 6 p.m., some 32 hours after departing. The search party arrived less than an hour later, having found a note we'd left at the T-intersection of the Tubes.

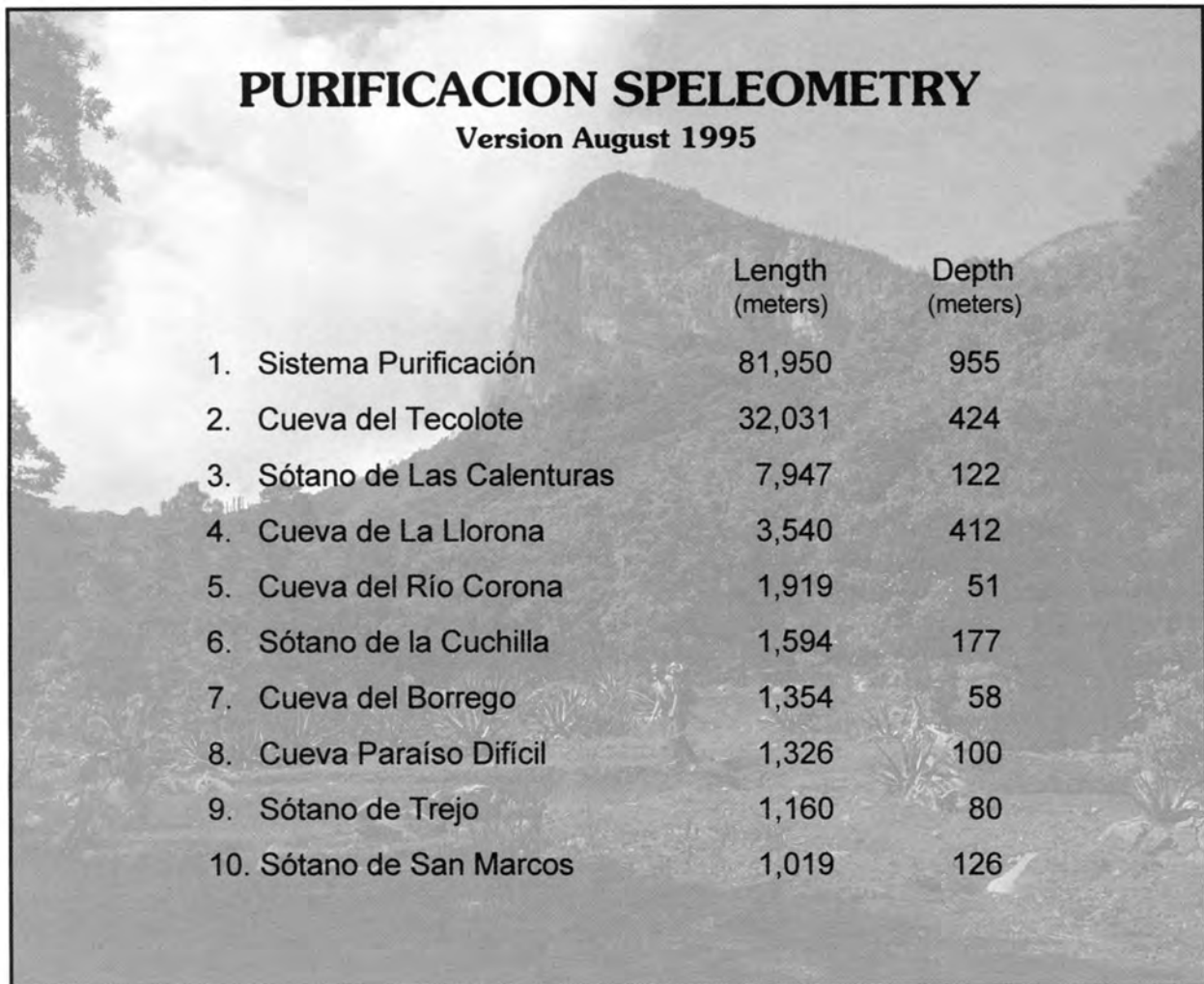
The following day was taken up by resting, surveying and picture-taking in the passageways between

camp and the entrance. The next morning Mark, Charles and I departed from the cave with the intention of checking a cave opening in the canyon downstream from Infiernillo. The survey team planned to remain until the following Monday to add to the survey as much of the newly-explored region as possible.

The downstream entrance was located approximately 2 kilometers from Infiernillo, high on the canyon wall. The cave appeared to be accessible but the route up went untried, since it would have been impossible to make the climb and return to the truck before dark. That night was spent near the Paso de la Muerte, and the next day several leads in the lowland canyons near

Guayabas were investigated. These turned out to be disappointingly small caves for the long hike involved, particularly in view of the large caves located in the same general geology in adjacent canyons.

That night we camped near the Nacimiento del Río Purificación, which consists of a large area of springs near the village of Los Angeles. It was not determined if there is a cave at this point, although local information indicated that a small opening does exist. These springs actually only add their flow to the river which, in dry weather, rises at another area of springs higher in the mountains, in the canyon north of the Paso de la Muerte. The return to Houston was uneventful.



**PURIFICACION SPELEOMETRY**  
Version August 1995

	Length (meters)	Depth (meters)
1. Sistema Purificación	81,950	955
2. Cueva del Tecolote	32,031	424
3. Sótano de Las Calenturas	7,947	122
4. Cueva de La Llorona	3,540	412
5. Cueva del Río Corona	1,919	51
6. Sótano de la Cuchilla	1,594	177
7. Cueva del Borrego	1,354	58
8. Cueva Paraíso Difícil	1,326	100
9. Sótano de Trejo	1,160	80
10. Sótano de San Marcos	1,019	126



# PURIFICACION AREA CAVE DESCRIPTIONS

by Peter Sprouse

Faunal lists compiled by James R. Reddell

## SOTANO DE LOS RAYOS

PEP 74

Cañada Verde, Nuevo León

Depth: 12 meters

UTM coordinates: E 443,980 N 2,650,875

This pit is located 300 meters southeast of Cañada Verde, at an elevation of 1830 meters. It is south of a road at a pass over a low ridge. The 12-meter drop lands on a leaf-litter floor. Sótano de los Rayos was located by Terry Sayther and others in May 1976, and explored on 1 April 1981 by Peter Sprouse and Terri Treacy.

- Spiders: Phonotimpus n. sp. (troglophile)
- Linyphiinae genus and species
- Harvestmen: ?Krusa sp. (?troglophile)
- Centipedes: Geophilomorpha undetermined
- Slender entotrophs: Campodeidae genus and species (?troglobite)
- Insects: undetermined larvae
- Rove beetles: Aleocharinae genus and species (troglophile)
- Flies: Diptera undetermined

## SOTANO DE CAÑADA VERDE

PEP 75

Cañada Verde, Nuevo León

Depth: 44 meters

UTM coordinates: E 443,890 N 2,651,065

Sótano de Cañada Verde is located 150 meters east of the village of the same name. It is a prominent pit situated just north of a road at 1850 meters elevation. The funnel-shaped pit drops 40 meters to a sloping floor. Located by Terry Sayther and others in May 1976, this pit was explored on 1 April 1981 by Don Coons and Peter Sprouse.

## SOTANO DE DULCES NOMBRES

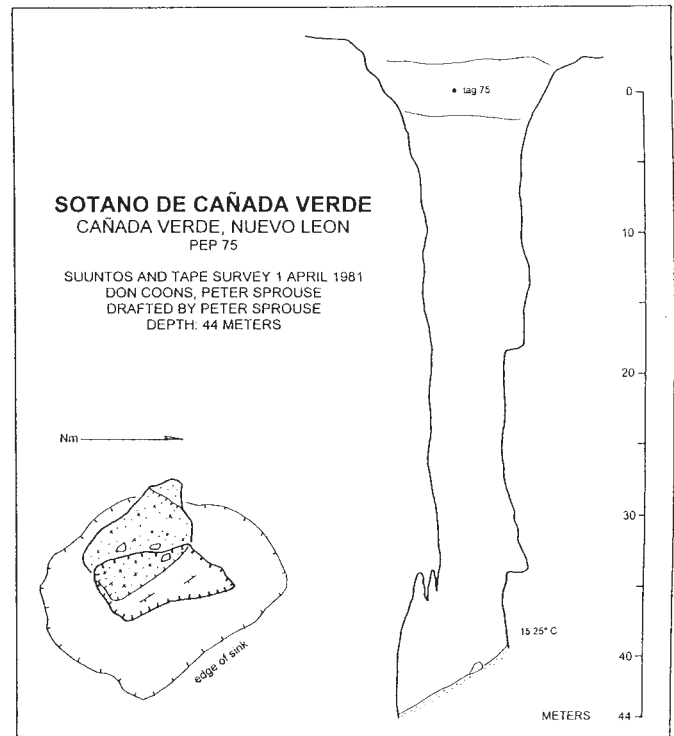
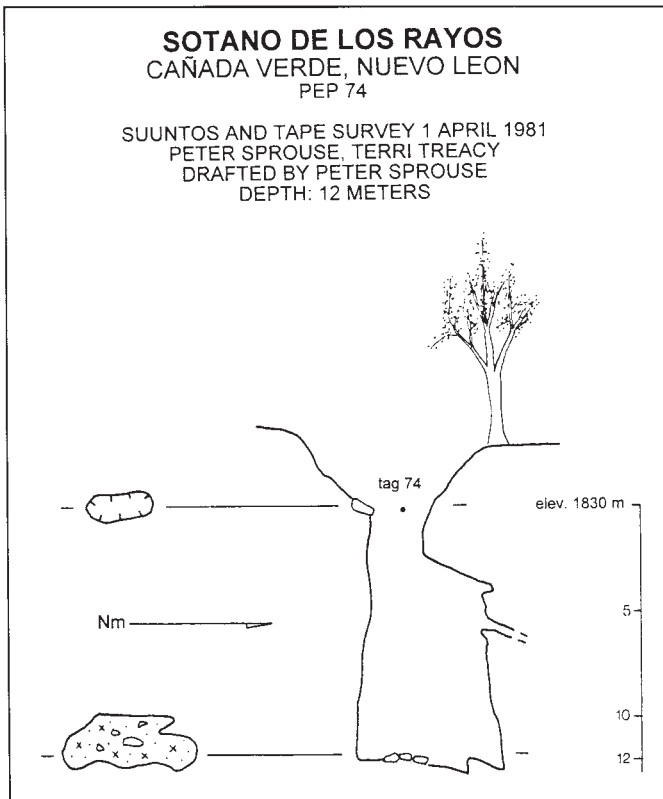
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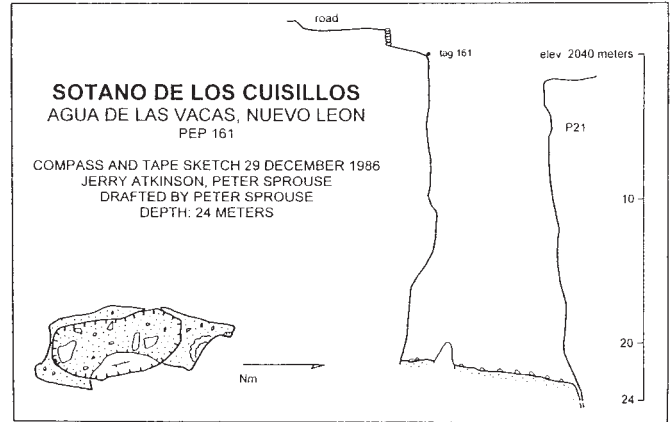
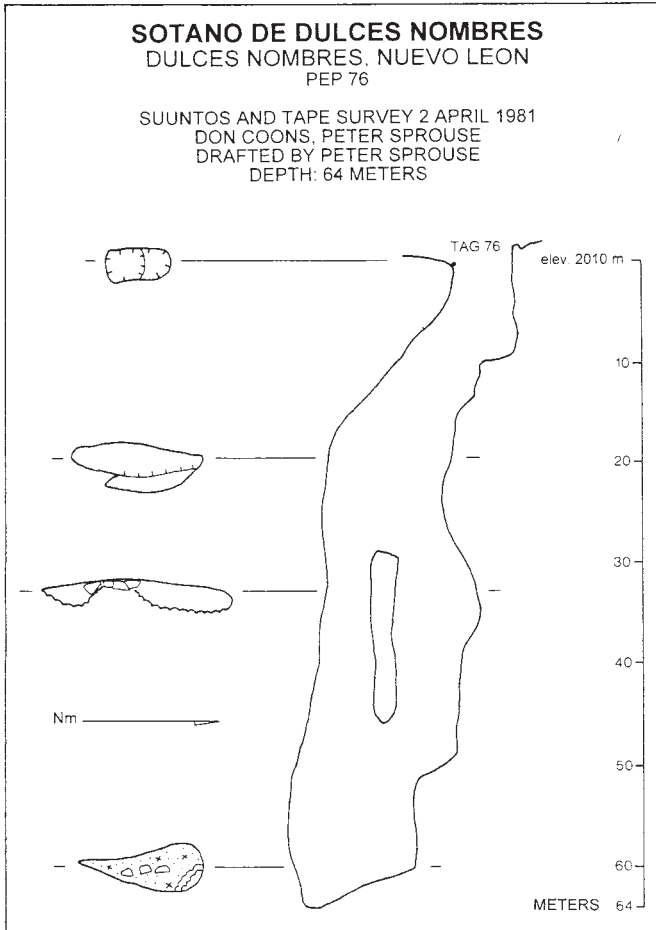
Dulces Nombres, Nuevo León

Depth: 64 meters

UTM coordinates: E 442,130 N 2,653,730

This pit is located 150 meters southeast of the mining town of Dulces Nombres. The entrance is in a flat area at 2010 meters elevation. The 60-meter entrance drop is divided by a bridge partway down. This pit was mapped on 2 April 1981 by Don Coons and Peter Sprouse.





**CUEVA CABEZA DE TRACTOR** PEP 197  
Las Chinas, Tamaulipas  
Length: 50 meters Depth: 17 meters  
UTM coordinates: E 454,975 N 2,638,920

This cave is located 1000 meters east of Rancho Nuevo, at an elevation of 2655 meters. It consists of a sloping passage of walking size that ends in a flowstone plug. David McKenzie and Paul Reavely explored and sketched this cave on 1 September 1989.



**SOTANO DE LOS CUISILLOS** PEP 161  
Agua de las Vacas, Nuevo Leon  
Length: 30 meters Depth: 24 meters  
UTM coordinates: E 448,922 N 2,649,775

This pit is located on the north edge of the road that goes west out of Agua de las Vacas, at a bend 1250 meters northwest of the village. It is situated in level terrain at an elevation of 2040 meters. It is a sheer shaft measuring 4 by 8 meters, and it drops 21 meters to a gently sloping rocky floor. Only a very tiny, impassable hole leads off of the north end. Sótano de los Cuisillos was shown to Sheila Balsdon, Peter Sprouse, and Terri Treacy, on 18 April 1978 by residents of Conrado Castillo. It was explored and surveyed on 29 December 1986 by Jerry Atkinson and Peter Sprouse.

Spiders: *Modisimus rainesi* Gertsch (troglophile)  
Mites: Acarina undetermined  
Harvestmen: Sclerosomatidae genus and species (troglaxene)  
Centipedes: Lithobiomorpha undetermined  
Millipedes: Diplopoda undetermined  
Cave crickets: Rhaphidophoridae genus and species (troglaxene)  
Planthoppers: Homoptera undetermined  
Darkling beetles: *Eleodes (Caverneleodes) sprousei* Triplehorn and Reddell (troglophile)  
Flies: Diptera undetermined

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