

The Pico del Oro Plateau Caving Expedition in 2026

14th August – 6th September 2026

An International Expedition that is part of a wider series of North Perú Caving Expeditions organised by Espeleo Club Andino (Perú) and Groupe Spéléo Bagnols Marcoule (France)

Sponsored by the Mount Everest Foundation and the Ghar Parau Foundation, and supported by Adventure Nutrition dehydrated meals.



Summary

This 2026 expedition returned to explore caves on the high altitude (3,250 to 3,700 m) Pico del Oro Plateau in North Perú. This high plateau is underlain by limestone units that have up to 2,800 m of relief, and it is situated above one of the largest karst resurgences in South America (of the Rio Negro). This is one of the few places worldwide where caves could significantly exceed the depth of the world's currently known deepest cave.

A super El-Nino occurred in 2026, and conditions were far wetter in 2026 than during previous 2022, 2023 and 2024 expeditions. For example, we had planned to extend Tragadero de la Soledad (currently the longest known cave in Peru), but its entrance pitches were impassable in 2026 due to flood water, despite being dry in 2023 and 2024. The 140 m surface entrance pitch of Golondrinitas that we hoped would be a back door into Soledad's downstream continuation, was also too dangerous to descend due to high water levels in 2026, again despite multiple attempts. Surface conditions were also very wet in the first half of the expedition, and one expedition member was brought down quickly and successfully by horse due to altitude sickness at the expedition's start.

The expedition thus had to adapt its strategies due to these high water levels, and initially focussed on finding an entrance into the largest of all the river sinks on the plateau, as this would be the most direct and obvious route to the Rio Negro resurgence. Considerable efforts were then expended, eventually including 'UK style' digging in the underground river level and in adjacent surface holes. At one point, we had highly promising leads in both subterranean river and surface digs, as well as finding a 90 m deep shaft that was very well located behind the main river sink. But these leads eventually finished and were choked. We also explored the high mountain to the southeast of base camp, again with challenging terrain, and sought to find a draughting cave entrance that had been noted by an archaeological expedition some 15 years ago, but again without major finds.

However, the weather improved markedly in the second half of the expedition, and the expedition had an exciting finale. On the last day, a new cave entrance was discovered that is ideally situated above the upstream continuation of the Tragadero de la Soledad streamway, just beyond its previously mapped terminal boulder choke. This streamway is far bigger than any other streamway in that cave, and its upstream continuation must drain sinks over an extremely wide (>5-12 km) area of the mountain range. This new cave was pushed to a depth of 197 m in the last 24 hours of the expedition, by three teams including one night shift. Excitingly, it was left ongoing in large-sized rift-passage at a 7m pitch, about 7m above the level to the main Soledad streamway. We hoped this cave could then be explored by a French-Peru expedition that followed a week later, but they too encountered very wet and challenging conditions. So this ongoing cave remains an enticing and open prospect for future expeditions, and in drier years other major caves may again be passable.

2026 Expedition Members (15 people)

Andrew Atkinson (UK)
José Antonio De Pomar Cáceres (Perú, ECA) – Expedition Co-Leader
Lizzie Caisley (UK)
Jules Carter (UK)
Nat Dalton (UK)
Gareth Davies (UK)
Dominik Frohlich (Germany)
Martin Holroyd (UK)
Sam Lees (UK)
Fleur Loveridge (UK)
George North (UK)
Sarah Parker (UK)
Pete Talling (UK) - Expedition Leader
Kai Trusson (UK)
Rachel Turnbull (UK)

We give a very large set of additional thanks to Liz Hidalgo and her parents (Perú), Jean Loup Guyot (France), Antonio de Pomar (TdP) for helping to organise many aspects of logistic that include local permissions, horses and local guides in Granada, and equipment storage. We also extend a very large set of thanks to Dario Labajos Conilla who again organised logistics, and provided the horses that carried our heavy equipment onto the high plateau.

Timeline (Chronogram) of 2026 Expedition

Date	
13 Aug	MH departs UK
14 Aug (fri)	MH arrive Lima and flies to Chiclayo. Main team fly out from UK.
15 Aug(sat)	MH takes bus to Chachapoyas, meets TdP there. Main group arrive in Chiclayo and stays night there.
16 Aug(sun)	Main team takes 13 hour (chartered) minibus from Chiclayo to Chachapoyas, and everyone stays night in Chachapoyas. MH and TdP visit Luya tackle store and do some initial shopping.
17 Aug	Main team shop in Chacha in morning – then go to Granada at 2pm, and stay night in Granada.
18 Aug	Team walks up hill from Granada to Calamina Camp [long day]
19 Aug	Team walks over from Calamina Camp to Camp 2, and sets up Camp 2 [short day]. GN, AA, GD, JC check gear is ok where stored in Tragadero de la Soledad. Kit recovered in heavy rain from 1pm.
20 Aug	RT ill (altitude sickness) in camp, horse arranged to take her down, assisted by others in camp. TdP and AA go to Calamina Camp for phone signal (poor this year). KT, ND, MH explore holes towards Megadolines, and get view into Megadolines. PT and GD prospect locally at Sink 3, and briefly dig sink. JC, DF, LC look for Rob Dover's and Chris Jones' caves to the East of Camp.
21 Aug	RT and SL go down to Granada with two horses and guide at first light. KT, JC, GN, ND – continue dropping holes beyond Golondrinitas and towards Megadolines. PT, TdP and MH locate the best route from base camp to the Picos del Oro Sink, and prospect holes at the start of ridge from col on that route (Machete Pot, Blind Pots 1 and 2, Tonio's Small Hole etc). FL, DF, LC, AA and GD explore draughting Nettle Pot and other holes (Starter for Ten) towards Golondrinitas.

22 Aug(sat)	PT, DF, JC, and AA prospect Bear Cave (possible way on) and features along base of bowl towards main Picos del Oro Sink. JC also looks at end of Picos del Oro sink in boulders for way on. MH, FL and TdP take walk in tough terrain onto Spiky Mountain to reccy route to the lake. LC, ND and GN drop Jules' Big Hole (now 'A Series of Unfortunate Events'). GD, KT and TdP briefly look at holes near Sink 3, and dig Sink 3.
23 Aug(sun)	AA, JC and LC found Golondrinitas to be too wet to descend, and explored nearby caves (Loose Labyrinth etc). SP, ND and GN went to 'blind valley' on spikey mountain to look for caves. KT, DF, MH, GD, TdP return to Bear Cave, but no way on, and drop 'slip rift' shaft above the main river-sink. A way on is seen through wet boulders in main river sink.
24 Aug	GD and MH dig boulders in main Picos del Oro river sink. PT, SP, JC, LC, FL, DF, and AA formed two teams prospecting depression located around and behind Picos del Oro Sink – from rocky col above main sink. Still very wet.
25 Aug	AA and KT go to Soledad to find the entrance series too wet and impassable. Everyone else in Camp – heavy rain all day.
26 Aug	GD, MH Look for new digs above Picos del Oro Sink. LC, KT, JC and AA prospected holes above Picos del Oro Sink, and found one good shaft at the end of the day. PT, FL and DM prospect holes further on in the same area behind big sink (finding some 2018 French Expo Targets). SP, ND, TdP, GN had a journey to the Magic lake, but no caves.
27 Aug	FL, PT, LC prospect depressions around Mossdale Sink on opposite side of bowl to Picos del Oro Sink. AA, KT, JC, DF find promising continuation of pot behind main Picos del Oro Sink. MH, GD and TdP continue digging draughting holes just behind main Picos del Oro Sink.
28 Aug	PT, FL, LC, ND go to Rift Cave, and finished. MH, GD, AtP kill the digging leads behind Picos del Oro Sink. AA, JC, DF finish promising pot beyond the Picos del Oro Sink. GN, SP and KT surveyed that pot.
29 Aug(sat)	PT, FL, SP and GN prospect the area above Sinks 4 and 5, and GN and SP go to col. AA, LC, JC go to Golondrinitas, but too wet to descend, with a large rockfall (again...) whilst AA rigging. KT, DF, TdP, GD, go down Torridon View, but too wet to go beyond previous limit.
30 Aug(sun)	PT, TdP, JC, DF, LC looked for Rob Dover's Cave – but still no luck. AA, GD, GN go behind the Spiky Mountain to enter hole seen in high cliffs. SP, ND, KT, FL also prospect on the Spiky Mountain to reach the kilo-doline of PTs 'A-lead'.
31 Aug	LC, AA, JC, DF prospect up the valley beyond Soledad, ending with a lake swim. PT finds Last Chance Saloon Pot, and goes back to camp to get KT, ND, SP and GN – who then start rigging Last Chance Saloon. That team return to camp at 5pm, and AA and JC then formed a second night shift team to continue rigging – left open at the end. TdP went to Calamina Camp to confirm an early trip down.
1 Sept	GN, LC, SP, GD, TdP keep rigging Last Chance Saloon. Horses arrive at Sink 2 Base Camp at 2pm (direct that day from Granada), and rest of team oversee the transfer of group equipment to Calamina Camp.
2 Sept	Whole team camp at Calamina Camp, walk down hill to Granada, and get (chartered) mini-van back to Chachapoyas at 3pm. Stay night in Chachapoyas.
3 Sept	Day spent in Chachapoyas, equipment transferred to Luya tackle store, and packed for journey home.
4 Sept	Chartered minivan journey (12 hours) from Chachapoyas to Chiclayo, and stay night in Chiclayo. Rejoined by RT and SL. TdP goes to Cajamarca from near Jaen junction.
5 Sept (sat)	Main team fly from Chiclayo to Lima, and then onto the UK.
6 Sept(sun)	Arrive back in the UK

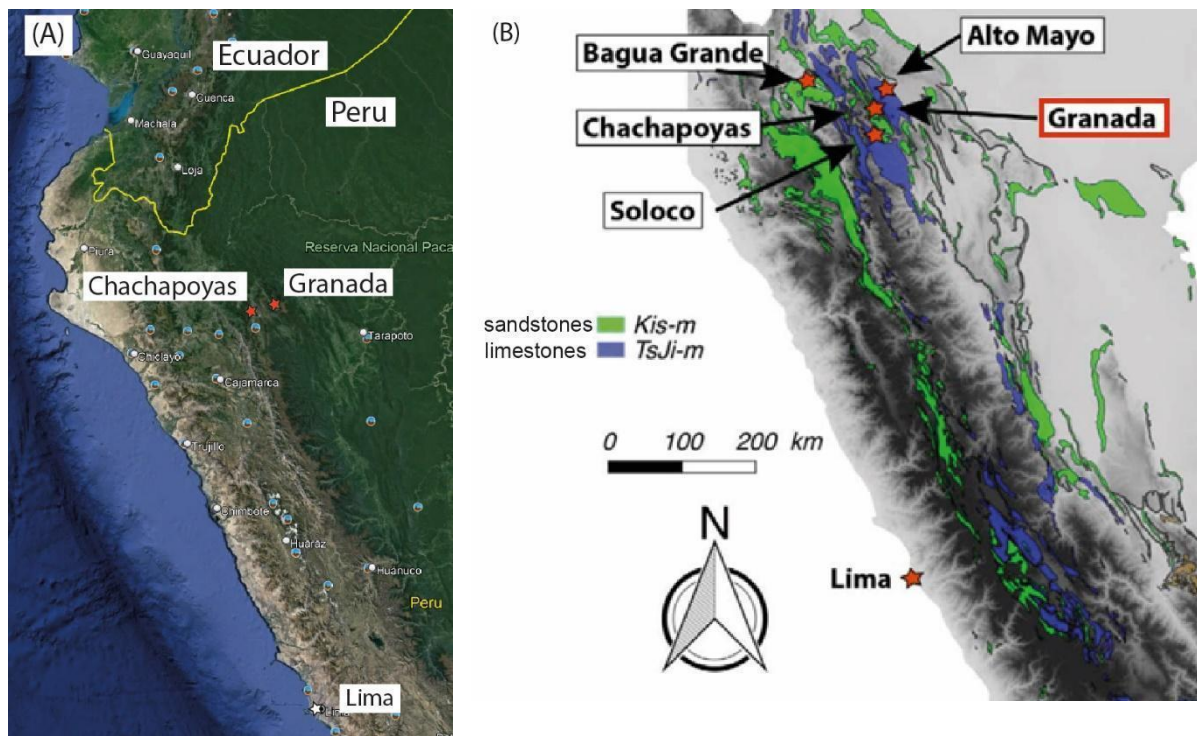


Figure 1. (A) Map showing location of Granada Plateau in northern Perú. **(B)** Geological map showing extent of limestone (blue) in northern Perú, with location of expedition area of Granada Plateau, as well as other major towns (e.g. Chachapoyas) and areas explored for caves in the past (e.g. Soloco). Figure from Baby (2020, 2023).



Figure 2. Map showing the expedition area on the Pico del Oro Plateau, above the village of Granada, to the east of Chachapoyas. Major caves, camps and the Rio Negro resurgence are also shown.

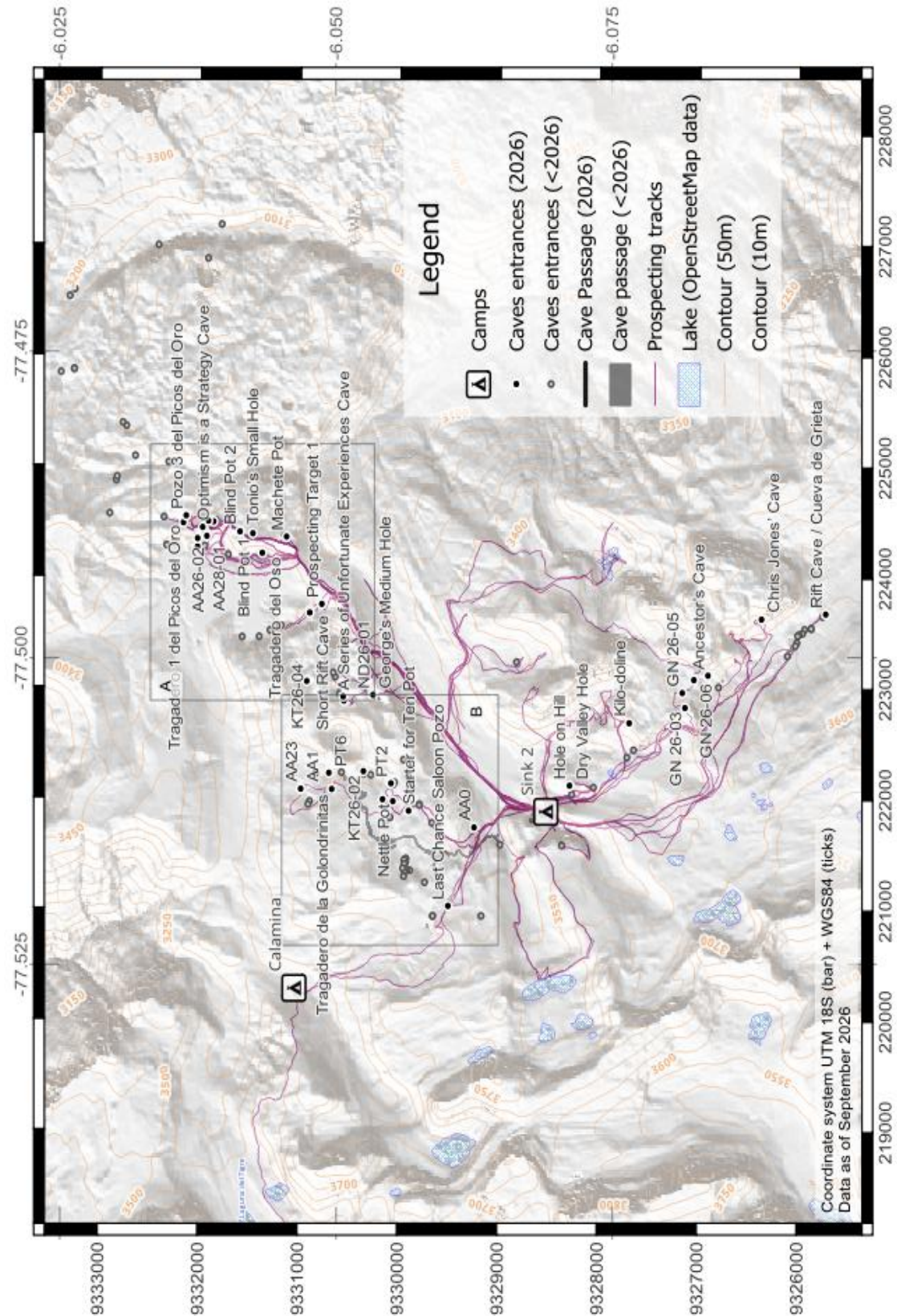


Figure 3. Detailed map of the expedition area on the Pico del Oro Plateau, showing caves or sinks visited in 2026 (black dots), tracks (purple lines) and camps (tent symbols). The survey of Tragadero de la Soledad is also shown as a thick grey line. Figure drawn by Nat Dalton using expo QGIS project.

Background to the Pico del Oro (Granada) Plateau

The expedition area was located in Northern Perú (Figs. 1 to 3). The area comprises a high (~3,300 to 3,700 m) plateau that is located to the east of the town of Granada, and bounded on its eastern side by a steep escarpment with over 2,800 m of relief above the Moyobamba Plain (Fig. 4). The correct name for the plateau is the Pico del Oro Plateau, although the informal term 'Granada Plateau' was used in 2026 and previous expedition planning. Granada is reached by a ~3 hour bus journey from the provincial capital of Chachapoyas (Fig. 2), which is a hub for tourism within Northern Perú. Chachapoyas can be reached via bus from Jaen (9 hours), Tarapoto (11-12 hours), Chiclayo (12-13 hours), Lima (25 hours) or other major cities. In 2026, we flew into Chiclayo, as the airport in Jaen is still not open. It is also possible to fly direct from Lima to Chachapoyas, but the landing strip is too small for large planes, and thus hold luggage is limited to < 20kg. We then teamed up with local guides in Granada (Dario Labajos Conilla et al.), who provided horses to carry equipment, and we are very grateful for their hospitality in Granada.

The walk onto the plateau (Fig. 2) from Granada initially reaches the Siete Lagunas (Seven Lakes), which is being developed for tourism, with new huts built since 2022. The lakes are indeed very beautiful, and may make an attractive site for future tourism. The previously explored Tragadero de la Laguna Maria Gondolan is located shortly before the Siete Lagunas (Fig. 2; Nord Perú 2018, 2019, 2022; Bigot, 2019). The walk continues over a col at 3,780 m that marks a major watershed, and descends to the Jacinto Camp (now sadly burnt out in a fire) and carries on to the Calamina Camp, which is a further 2-3 hours (Figs. 2 & 3). As in 2024, the 2026 Expedition used a final base camp near Sink 2, and this was reached in a shorter walk on the second day with horses from Calamina Camp.

The terrain on the plateau can be challenging and very tussocky, with pinnacle karst in some areas. The weather on the plateau is highly variable, often with rain in the late afternoons, but also with some very sunny days, or thunder-storms. The 2026 expedition occurred in a super-El Niño year and initially encountered much wetter conditions than in either 2022, 2023 or 2024. We note that 2023 and 2024 were referred to as extreme drought years by locals. The ground was thus much wetter for camping in 2026, and the rivers were also significantly higher, especially in the first week. It was found that some major caves (Tragadero de la Soledad, Golondrinitas, Torridon Cave) were too wet to enter in 2026, even though they were dry in 2024 and 2023. Even though the river levels dropped in the 3-5 days after rain, some of these caves (e.g. Soledad) had entrance pitches that remained impassable. The potential for being flooded in during years with greater rainfall – thus needs further very careful thought by future expeditions. Temperatures can sometimes dip below zero, with a light frost. There is no light pollution, so the stars and milky way are especially vivid.

Previous cave exploration: Four previous French-Peruvian caving expeditions have been to the karst areas around Granada, in 2018, 2019, 2022 and 2023 (Nord Perú 2018, 2019, 2022, 2023). Indeed, the ECA-GSBM group have been exploring for cave systems in Perú for over 20 years, with a really excellent summary of that cave exploration history in Guyot (2019). Information on the previous expeditions across Perú is available at www.cuevasdelperu.org, which is an incredibly detailed resource for caving in South America.

The initial 2018 ECA-GSBM expedition was linked to a karst conference in Chachapoyas, and was used to explore the intriguing Tragadero de la Laguna Maria Gondolan (Nord Perú, 2018). Then, in 2019, a camp was set up on the high plateau to explore the Tragadero 1 de la Planura del Pico del Oro (Nord Perú, 2019), and adjacent sinks (e.g. Sinks 17 and 18 that were also visited in 2023). An expedition in 2022 then found the entrances to Tragadero de la Soledad and Tragadero de Rayo Urmana, and confirmed the excellent potential of the area (Nord Perú, 2022). These expeditions also confirmed the challenging nature of the terrain, especially beyond Tragadero 1 de la Planura del Pico

del Oro. The nature of the terrain meant that a larger team (with more horses) was needed in 2023, with self-sufficient satellite camps. This same model of lightweight satellite camps was used again in 2024, with an even larger team of 27 cavers, organised into three overlapping groups. The 2024 expedition comprised three overlapping teams. The first team explored Lorenzo's Left and Right Eye Sinks to a conclusion (perched sumps). Two separate teams encountered flash flooding in both Lorenzo's Eye's Sink on the same day, with flood water sealing both entrances. Those teams emerged 24 hours later, after luckily sitting out the floodwaters in suitable locations (i.e. not pitches). This was despite 2024 being a drought year. The second team explored Tragadero de la Soledad to -325m depth, making it the (currently) longest cave system currently known in Perú. They also found the impressive 140 m deep Golondrinitas Shaft located just beyond the known end of Tragadero de la Soledad, and two minor leads were left at the end of Soledad. The third smaller team successfully found another large shaft (Abra del Arco, also ~140 m) that is likely the source for inlets within Tragadero de Soledad, which enter near its Triumph of the Matriarchy Chamber. Various other smaller caves were found close to Sink 2 camp (e.g. Cave on the Col, Torridon View Cave), and small caves were left ongoing associated with the line of sinks that stretch to the east of the base camp (e.g. Rift Cave).

Geology and Hydrology of the Pico del Oro Plateau: The allure of the Pico del Oro is partly because of its large relief above the very large resurgence of the Rio Negro (Fig. 4 and 5; Baby, 2020, 2023). Indeed, there is up to 2,685 m of relief between the Rio Negro resurgence at 865 m, and cave entrances such as Tragadero de Rayo Urmana at 3,550 m, Tragadero de la Soledad at 3,420 m, and Lorenzo's Sinks at 3,290 m (Fig. 5). This resurgence has an average flow rate of ~24 m³/s, with much higher flow (up to 35 m³/s) in floods (Grandjouan et al., 2017). Moreover, the water in this resurgence is notably colder than other resurgences along the mountain front, suggesting quick through-flow times, and its large discharge suggests a large underground catchment (Grandjouan et al., 2017). Analysis of the magnitude of the discharge is also consistent with a drainage area including the Pico del Oro (Grandjouan et al., 2017). It is possible that the major river-sinks on the high plateau drain to an as yet unknown resurgence located in the very densely forested area on the steep escarpment down to the plain, where satellite images cannot penetrate. But if these river sinks drain to the Rio Negro resurgence, the resulting cave system could exceed the depth of the current known deepest cave (i.e. 2,210 m). Moreover, such a cave system would have a remarkably long horizontal separation of ~23 km to Tragadero 1 de la Planura del Pico del Oro, or even 28 km if the cave system includes the Tragadero de la Soledad streamways. The furthest known point from a cave's surface entrance is currently about ~12-15 km, so this distance is also world class.

An excellent detailed summary of the geology and hydrology of the Pico del Oro Plateau is provided by Baby (2023), setting out this potential for deep caves (Figs 4 and 5; also see Baby et al., 2020; and Bigot et al., 2018). A brief summary of these previous publications now follows (Figs 4 and 5).

The stratigraphy of the Pico del Oro Plateau includes a series of Cretaceous-to-Jurassic sandstone units, which form resistant *cuestas* (ridge-lines) along the massif's main crest (K_{i-o} and J_{s-s} units in Fig. 6). These sandstones and underlying mudstone layers dip westwards, back towards Granada (Fig. 6). Underneath the sandstones and mudstones are a series of Jurassic units that contain thick limestone intervals (e.g. J_{i-a} and J_{i-c} in Fig. 6). These limestone rich units are underlain by Triassic units (T_{s-ch}) which are described contradictorily as either as limestone-rich (1:50,000 geology maps) or sandstone and mudstone rich (1:100,000 geology maps). But structural cross sections extending from river sinks on the Pico del Oro Plateau and to Rio Negro may suggest they are connected (Fig. 5).

Only one small resurgence has been found actually on the high Pico del Oro Plateau, and it occurs at the far southern end of the line of sinks extending south and east from Calamina Camp (labelled 'main resurgence' on Fig. 7). This resurgence was visited in 2024, and found to be small and blocked.

However, this resurgence (3320 m) is higher than the sink at Tragadero 1 de la Planura del Pico del Oro, or indeed the lowest surveys points in Lorenzo's Right and Left Eye Caves, or the end of Tragadero de la Soledad, it cannot thus contain the water from these major river sinks and streamways. Originally, it was hypothesised that the water from Tragadero de la Soledad, and maybe all 12 other sinks along a SE-NW line (Figs. 3 and 7), drained to this 'main resurgence'. But this now known not to be the case, as both streamways in Tragadero de la Soledad head away from this resurgence (Fig. 7) and are too low.

The elevation above sea-level of the end of the streamway (~3,095 m) in Tragadero de la Soledad system is also much higher than any known sump on the plateau, and this water must also drain to a lower resurgence. It is also not clear where the water originates in that largest of the two streamways (Pisco and Codeine stream) in Tragadero de la Soledad, as this streamway heads NW back towards Granada (Fig. 7). It may yet collect water from along the line of numerous sinks (i.e. sinks 2 to 6), which must then double back to flow first north and then south. This means there may be very considerable cave passaged beyond that upstream choke in Pisco and Codeine. It is very unlikely to be connect to Tragadero de la Laguna Maria Gondolan that likely resurge nearer to Granada (Fig. 3). Understanding the origin of water in the Pisco and Codeine streamway is intriguing, and the 2026 expedition may have located a cave entrance (Last Chance Saloon) that is well placed to do this. It is also important to find the underground confluence of the main stream in Tragadero de la Soledad and water from Tragadero 1 de la Planura del Pico del Oro, Sinks 17, and 18, possibly as well as Lorenzo's Right and Left Eyes; and the combined water then heads towards the Rio Negro Resurgence. This hypothesis may yet be thwarted by thick mudstone bands, perched sumps, or by a paucity of limestone in the Triassic (e.g. T_{S-ch}) units. But there is potential for an exceptionally large underground drainage system that leads to the huge Rio Negro resurgence that is 2,700 m deeper than the entrance of Tragadero de la Soledad, and about 25 km away.

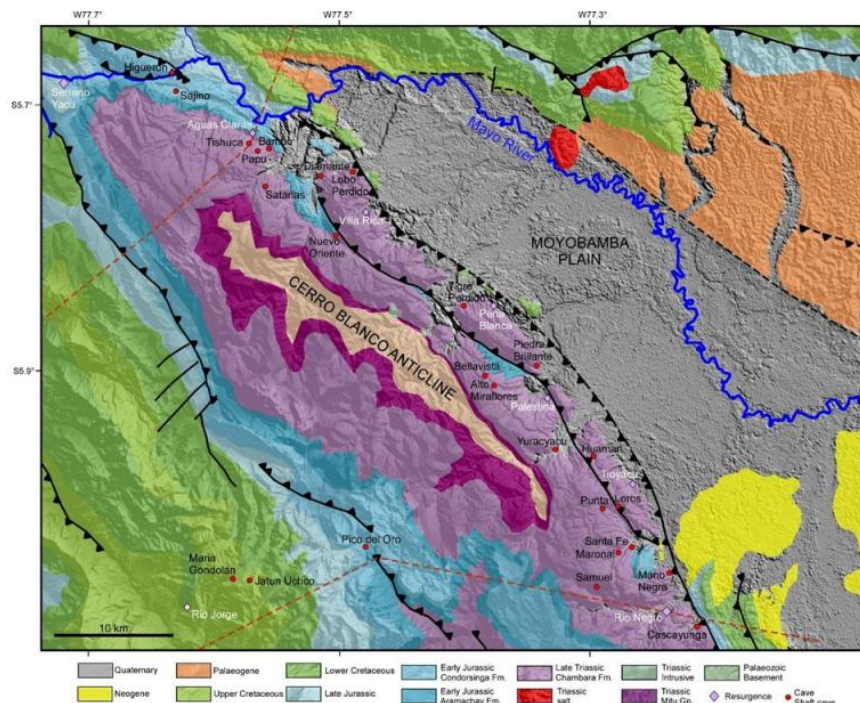


Figure 4: Geological map of the Cerro Blanco massif, showing the location of major caves and resurgences, which is reproduced from Baby et al. (2023). Pico del Oro label denotes Tragadero 1 de la Planura del Pico del Oro; the red dotted line shows the location of the cross section in Figure 5.

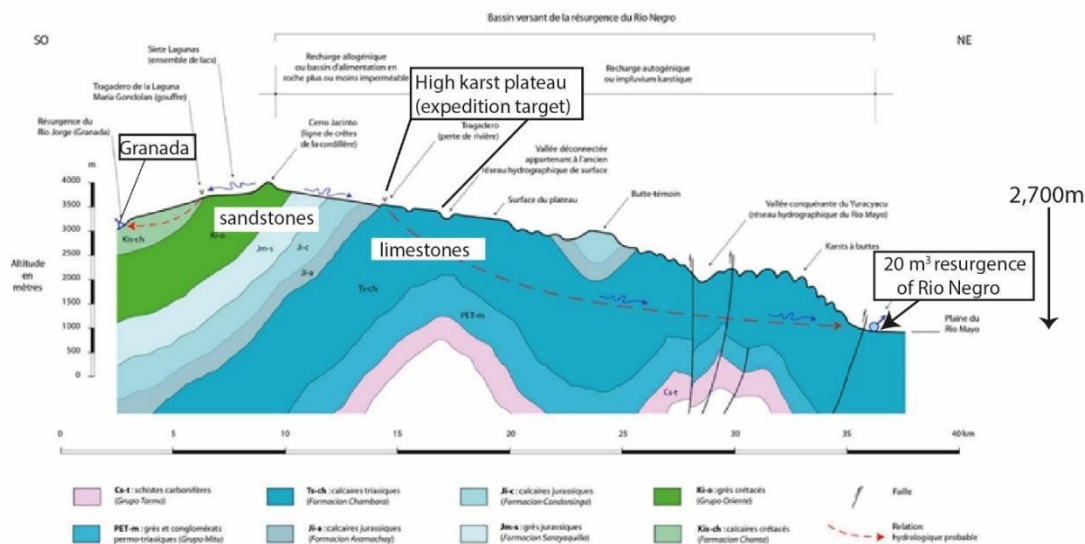


Figure 5. Geological cross section from Granada (left) to the massive resurgence of the Rio Negro (right). From Bigot (2019), and see Baby et al. (2020, 2023). Rivers flowing across sandstones sink when they reach limestones (in blue). The limestone units have a vertical elevation change of up to 2,700m, which exceed the depth of the deepest known cave. Dye test have not been performed, but it is hypothesised that rivers sinking on the high plateau drain to Rio Negro (red dotted line).

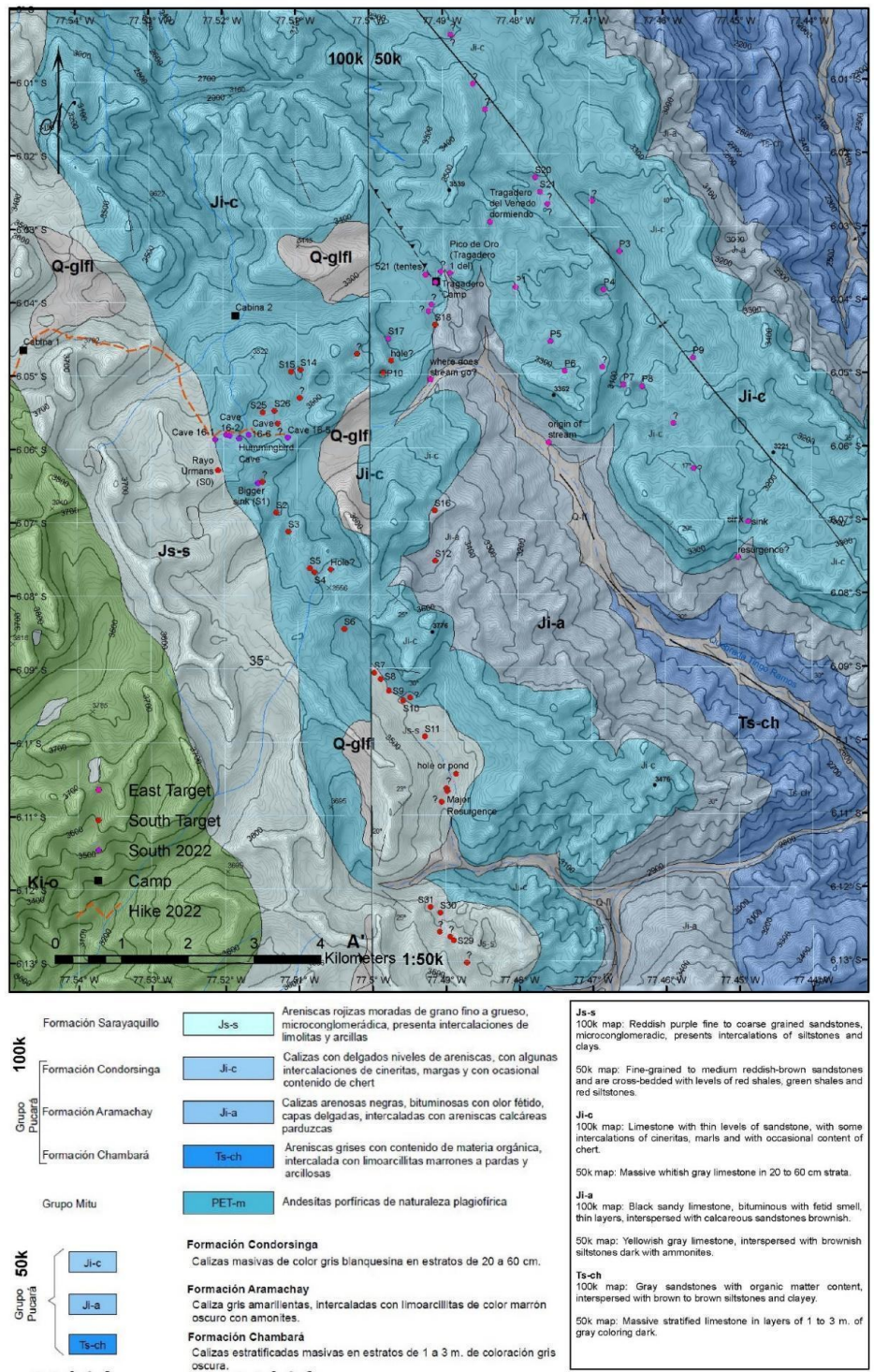


Figure 6. Geological map that combines information from 1:100,000 scale (left) and 1:50,000 scale geological maps, downloaded from the excellent Peruvian Geological Survey website.

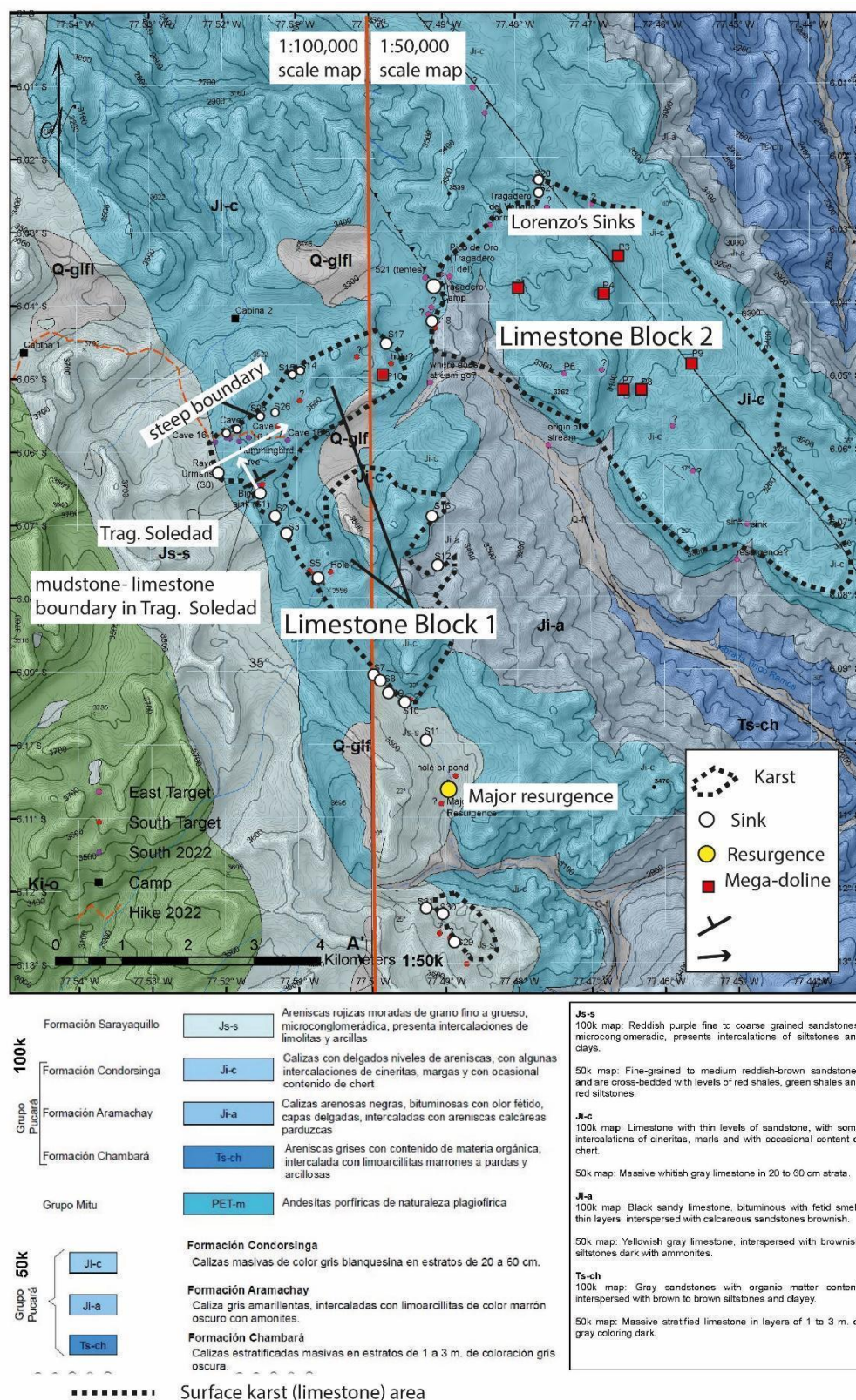


Figure 7. Geological map (as in Figure 6) with superimposed information from field observations in the 2023 expedition, including areas of surface limestone karst and other geological observations.

List of Caves Explored in 2026 Expedition

The 2026 Expedition was a single team based at a camp next to Sink 2, to aid communications, and to allow (albeit sometimes lengthy) walks to caving targets over a wide area on all sides of that camp.

The caves that were visited and/or explored in 2026 are described below:

Caves near Tragadero 1 de la Planura del Pico del Oro (shortened herein to 'Picos del Oro' Sink).

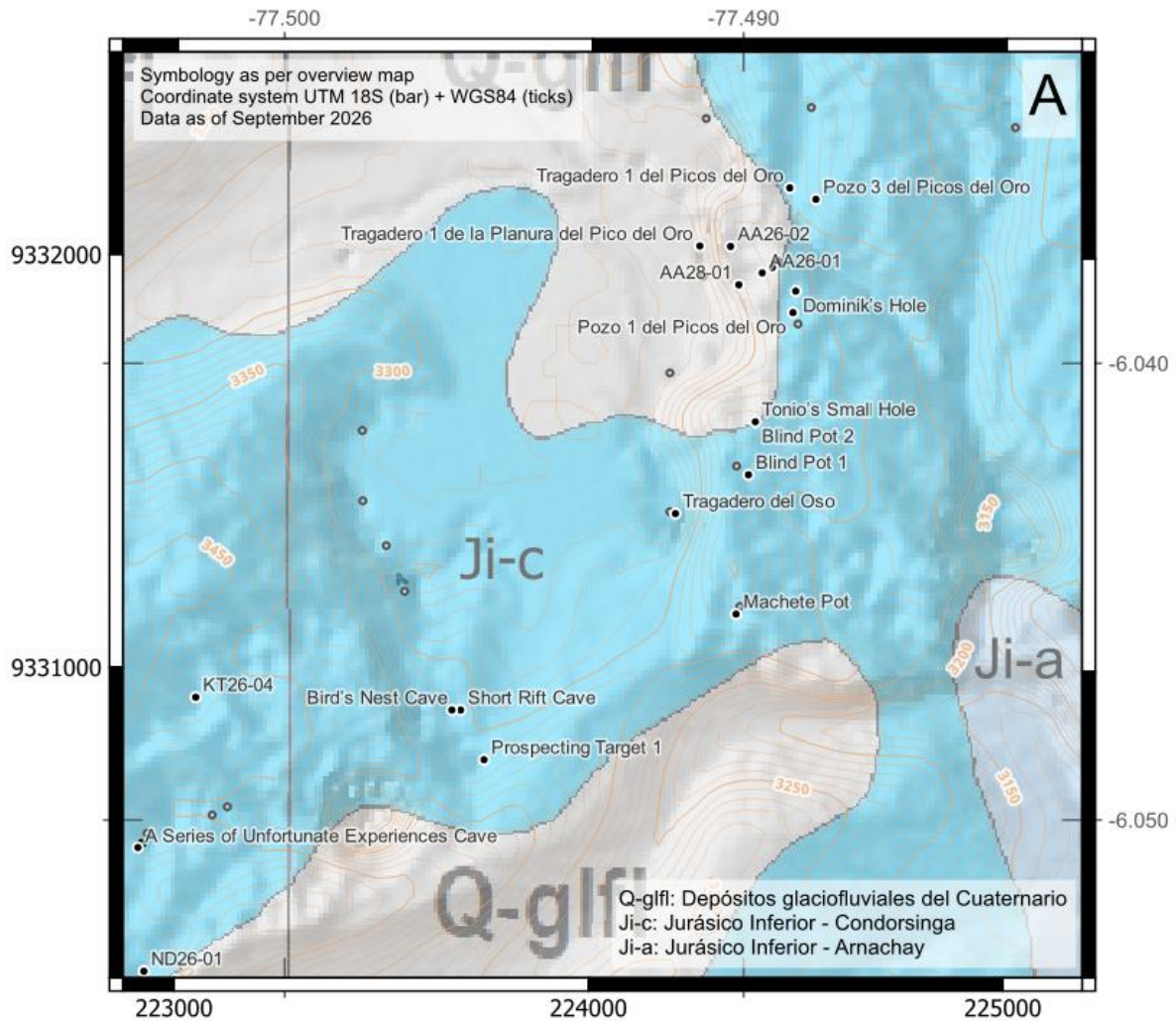


Figure 8. Detailed map of the area near to the large sink of Tragadero 1 de la Planura del Pico del Oro, showing cave entrances visited in 2026, and underlying geology Figure drawn by Nat Dalton.

Tragadero 1 de la Planura del Pico del Oro: Coordinates -77.49097 -6.03744 3270 m

The largest and most significant river sink on the entire Picos del Oro Plateau. Visited by several previous expeditions, and surveyed by Bigot et al. in 2022.

The river goes out of daylight and passes through large boulders at the foot of the cliff. The previous limit of exploration was reached at a tight squeeze above the water, and passed (using Hilti caps; Fig. 9) into a continuation. However, this unfortunately finished at a second and conclusive termination that could not be enlarged with Hilti caps.

The obvious (slip) rift that lies above the river, and was previously descended, was rigged again. But again no way on was found at the bottom, where the water was rejoined.

Various holes were explored and dug (with Hilti caps) in the cliff directly above the main river sink. One hole had strong draft and it was dug vigorously, but it eventually led back to the slip rift explored in previous years. No way on was found.



Figure 9. Draughting dig in hillside above the main sink of Tragadero 1 de la Planura del Pico del Oro, but which eventually connected back to the known shaft behind this sink.

Machete Pot: Coordinates - 6.04550°S 77.49018°

Base of large doline. Two holes, right hand hole goes to low chamber. Both holes choke. No way on.

Blind Pot 1 (PT26-04): Coordinates - 6.04245°S 77.48991°

No way on.

Blind Pot 2 (PT26-05): Coordinates - 6.04129°S 77.48976°

No way on.

Tonio's Small Hole (TDP26-01): Coordinates - 6.04129°S 77.48976°

Rope climb down 3m. No way on.

Soggy Bottom Depressions 1 and 2: Coordinates - 6.04593°S 77.49145°

Bottom of grassy doline. No entrances or way on.

Tragadero del Oso (see NorPerú 2018/19 expeditions) 77.49150 W 6.04330 S 3283m

Past trips stated a wetsuit would be needed. Initially thought there could be a way on through a very loose (but dry) boulder choke. Dug but no way on – too small, loose and dangerous. Proper scaffolding bars would be needed, and long term!

Blind Doline 1: Coordinates - 6.04026°S 77.48834°

Blind depression, no cave at bottom.

Blind Doline 2: Coordinates - 6.04171°S 77.48955°

Blind depression, no cave at bottom.

Pozo 1 del Picos del Oro - 6.03890°S 77.48894° 3,310m elevation

Shaft found but not descended by 2019 expedition in difficult terrain behind main river sink. We think we found it, but no draft noted – and undescended and needed a handline.

AA26-01 – Coordinates 6.03803°S 77.48961° W 3,260m elevation

Doline behind main river sink. Sling around a large nearby boulder to assist rigging, followed by a sling around an entrance boulder to rig a rebelay. Pitch heads down into a mossy chamber. A tighter squeeze led into a parallel shaft, with daylight above. Shaft continues down, requiring a bolt rebelay, but chokes into a soak away. Roughly 15m deep. No way on. At least 3 associated holes are also blind.



Figure 10. Lizzy Caisley in AA26-01

AA26-02 – Coordinates 6.03745°S 77.49030° W 3,270m elevation

Doline behind main river sink. Bolts placed in nearby rock for backup, leading to a sling around a large boulder to rig a rebelay. A 40m shaft with 3 rebelay is joined by a second shaft running parallel. There are several windows between the 2 shafts all of which are difficult to get to. The shaft ends with a boulder floor and animal bones. Immediately there is a small rift leading off in a downwards direction that is not human sized. Following the chamber floor downwards there is a

passage off to the left with a large boulder in the middle this can be squeezed past into a second rift. This rift drafts slightly and continues down but is very tight. No easy way on.

Optimism is a Strategy Cave (AA26-05) – Coordinates 6.03791°S 77.48939° W 3,290m elevation

Length = 145 m Depth = 100 m

Well placed, draughting and initially promising 100m deep cave in doline behind main river sink. First pitch is tricky rig due to mossy walls, and maybe 40m deep (description does not say), with several rebelayes. This pitch opens into triple shaft. A scramble down over muddy boulders then led to what looked like a blockage, but an ongoing 6m hole down was found. (There is also a canyon that might be worth traversing across at this point). The final 15m pitch leads to a small chamber and to squeeze (passed only by Andrew Atkinson). A second squeeze leads to a soak away, with no way on. An aven was then climbed, leading to another squeeze, but it eventually became too small. The draft disappears into lots of holes, and no way on was found. The lower part of this cave must be very close to the height of the main Tragadero 1 de la Planura del Pico del Oro streamway, as that river sink is only ~50m lower than the entrance to Optimism is Strategy Cave, according to GoogleEarth.



Figure 11. The entrance to Optimism is a Strategy Cave, which is well positioned behind the largest river sink, but which eventually choked. The base of this cave must be at, or below, the river level.



Figure 12. Entrance pitch for Optimism is a Strategy Cave.



Figure 13. Rigging past boulder in Optimism is a Strategy Cave.

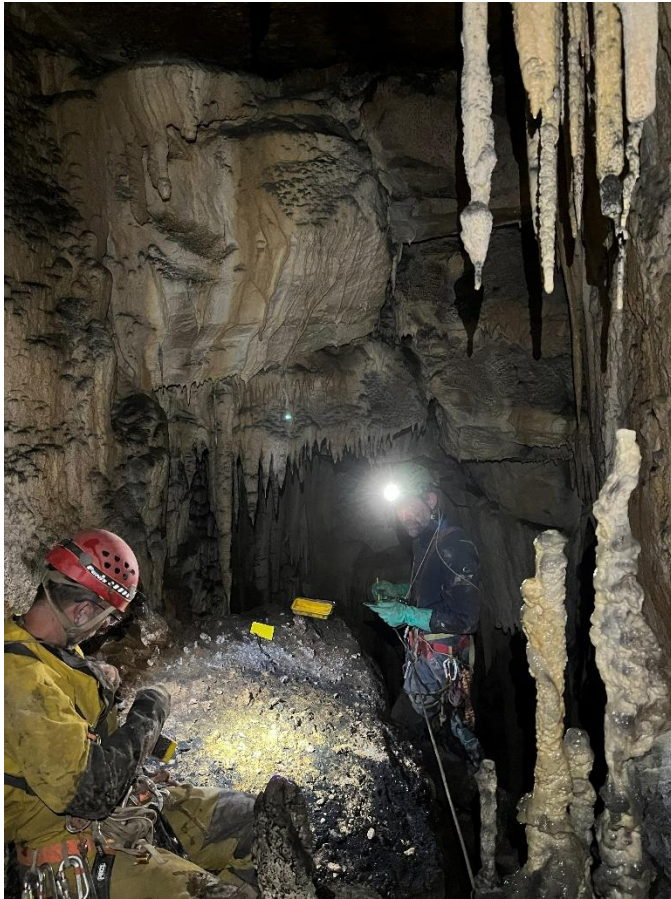


Figure 14. Surveying in Optimism is a Strategy Cave.



Figure 15. Looking down lower pitch in Optimism is a Strategy Cave.

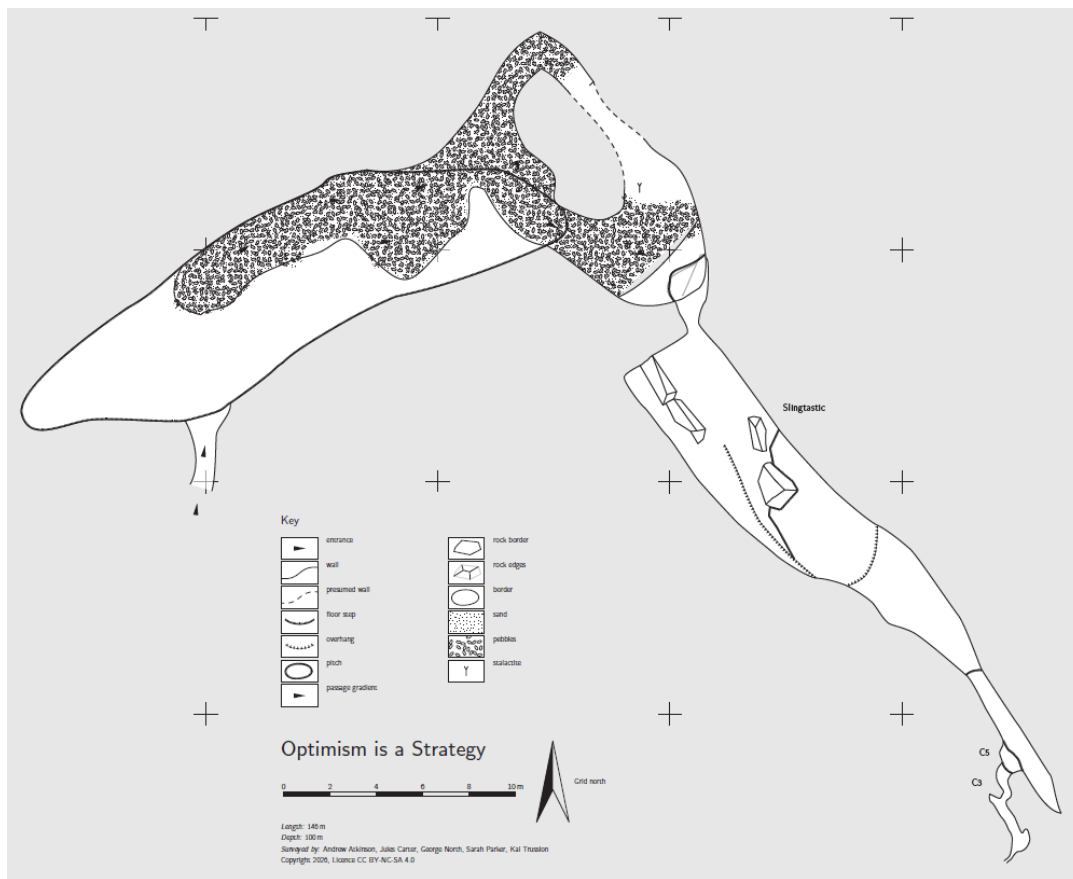


Figure 16. Survey of Optimism is a Strategy Cave, showing plan (top) and elevation (bottom).

AA28-01 – Coordinates 6.03829°S 77.49012° W 3,304m elevation

Hole in cliff seen from distance, but an alcove – and no way on.

Dominik's Hole – Coordinates 6.03843°S 77.48888° W 3,309 m elevation

Hole at base of doline, leads to narrow slot, which needs oversuit. No draft, and not a strong lead. But not pushed.

Very Thin Person's Hole – Coordinates 6.03691°S 77.48968° W 3,302 m elevation

Very small hole. No draft, and not a strong lead. Not descended.

Tragadero 1 del Picos del Oro – Coordinates 6.03617°S 77.48901° W 3,309 m elevation

Previously recorded by 2019 expedition but not descended. 4m pitch lands in a small chamber, but no continuation. No draft either.

Pozo 3 del Picos del Oro – Coordinates 6.03642°S 77.48844° W 3,312 m elevation

Undescended shaft reported by 2019 expedition. 13m mossy shaft descended on rope, with awkward rigging. But chokes, and no way on.

Prospecting Target 1 – Coordinates 6.04869°S 77.49567° W 3,312 m elevation

Between col and Mossdale Sink. Climb down into boulders into chamber, where water sinks., No way on. Draught at entrance, but could not trace inside.

Short Rift Cave – Coordinates 6.04833°S 77.49618° W 3,313 m elevation

Between col and Mossdale Sink. Walk in rift entrance at base of large doline, rift doubles back, and can crawl to small chamber. No way on and no draught.

Bird's Nest Cave – Coordinates 6.04760°S 77.49637° W 3310 m 3,310 m elevation

Between col and Mossdale Sink. At base of doline, 4m down climb (handline used) on one side of big boulder, into inclined rift. Descends ~20m in rift to boulder choke where water sinks – no way on.

Caves near Tragadero de la Golondrinitas and towards a large Megadoline

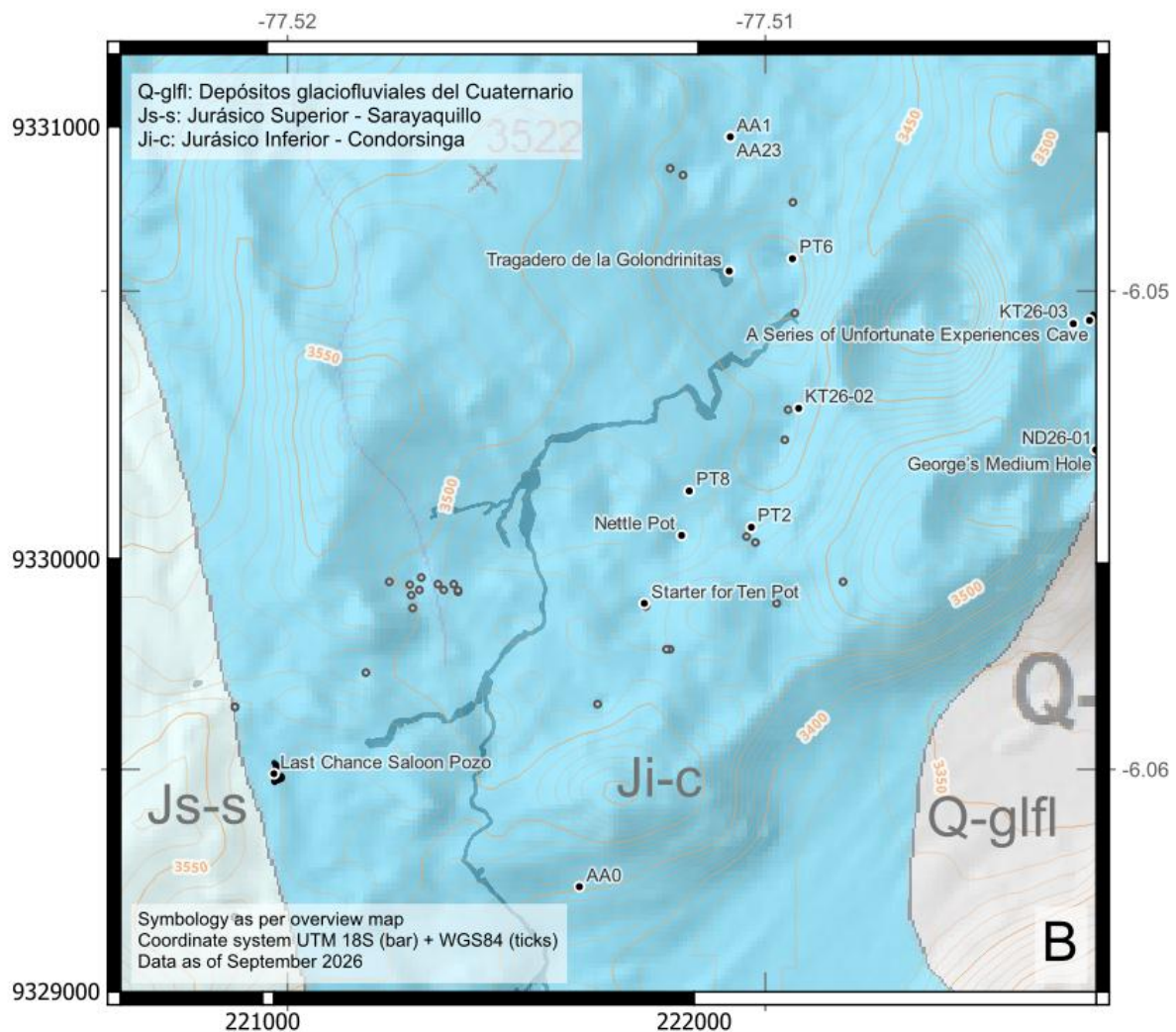


Figure 17. Detailed map of the area above Tragadero de la Soledad and Golondrinitas, showing cave entrances visited in 2026, and underlying geology. Figure drawn by Nat Dalton.

Tragadero de Golondrinitas – Coordinates - 6.04958°S 77.51075°W 3415 m (3888m at entrance pitch) [220m long and 158 m deep] [explored and surveyed in 2024]

Major feature with four small active streams draining into it, and swifts nesting. It was found to be too wet to be safely descended in 2026 due to much higher water levels. The second attempt to rig its entrance also encountered loose rock, and great care is needed when rigging this big shaft. The following description from 2024 is included for completeness. The entrance is well placed because it is about 300m higher, and 170m horizontally from the current known end of Tragadero de la Soledad, and may provide a back door into a continuation of that cave.

There is a large entrance pit (~120m deep) at the base of the doline, which is best reached from the surface pools of water on the eastern side of the doline rim, by scrambling down steep grass and one of the stream beds. The entrance pitch is a ~120m deep shaft, and at the base of the entrance pitch there is a large (30m x 20m) chamber. A narrow rift takes the water at the base of this chamber, and cobbles and sediment could be scooped by hand to enlarge that rift to allow progress, although caps (or plug and feathers) may be needed to remove rock protrusions to allow progress. A clean washed

and larger passage could be seen ahead, and it carries a draft. A very loose climb up to the boulder slope at the top end of the chamber found, with no way on.

Several attempts were made to descend the entrance pitch in 2026, but it was found that the large entrance shaft receives water from 4 significant streams in wetter periods. These additional streams make the shaft very dangerous, especially as they could rise suddenly if there is further rain. The shaft was also again found to be extremely loose, with a second major rock collapse, after a major incident with loose rock in 2024. The shaft was not descended in 2026, and lower water levels are needed.

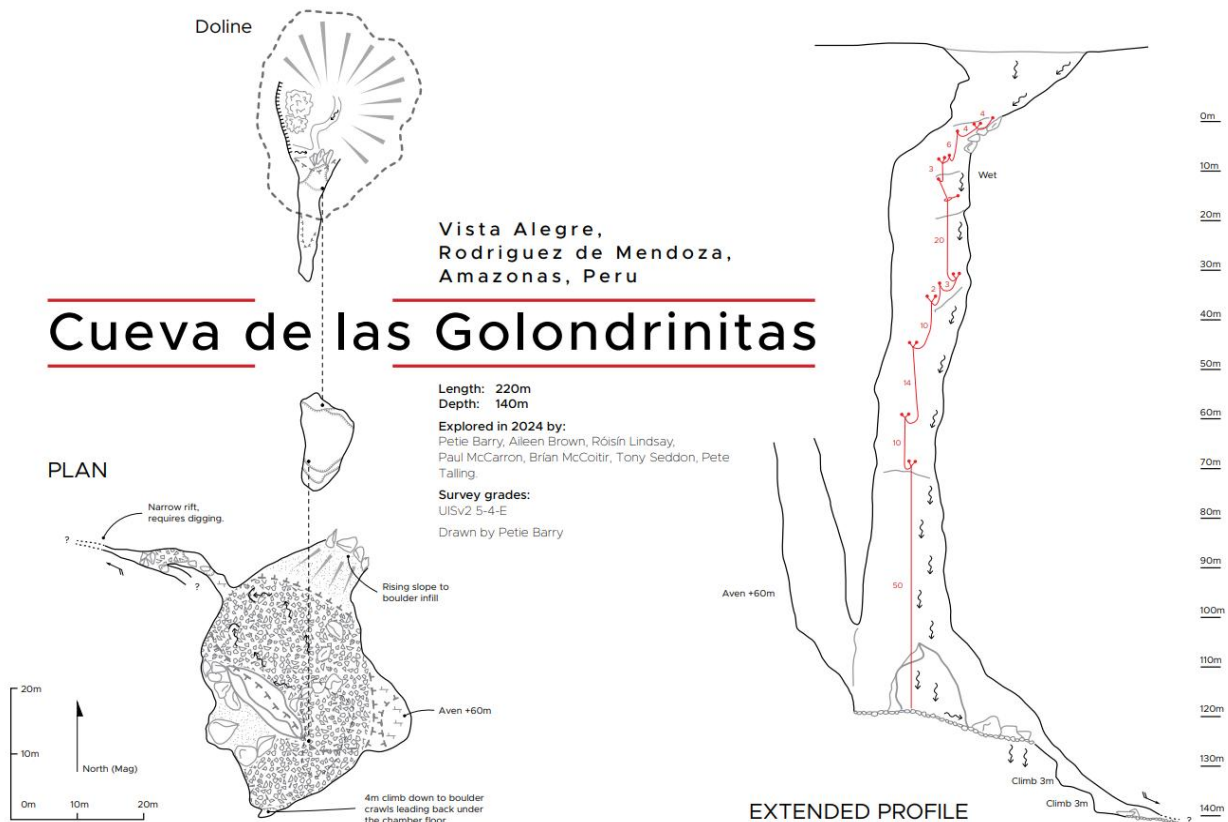


Figure 18. Survey of Cueva de las Golondrinitas, with pitch lengths. Drawn by Petie Barry in 2024.

Nettle Pot - Coordinates - 6.05511°S 77.51175°W 3,466 m elevation

The cave entrance is found at the base of a cliff in a deep and impressive shakehole. A tricky climb down boulders (C6) immediately inside the entrance lands in a large boulder chamber. Down slope is choked, but slightly upslope and back on oneself, there is a gap in the boulder from which a short pitch (P10) can be accessed. This was rigged on thru bolts in 2024 following a little boulder rearrangement. The pitch is sloping and lands in a boulder chamber. High above another skylight entrance can be seen, although this was not located on the surface. A small hole (P3) leads down a drop of a few metres where a pulse was used to aid descent (and more importantly, ascent). This landed at the base of more boulders, really a continuation of the same chamber. The cave drafts and continuation could be seen below through the boulders. Brief excavation unearthed a climb down to a slab (C3). A further pulse aided this final climb down this, following which a further short descent amid boulders lead to a finish - no way on. All descents could be made on a 25m rope.

Starter for Ten Pot - Coordinates -6.056531°S -77.512531° W 3,478m elevation [depth ~20m]

Climb down a doline leads to two entrances, with lower entrance being easier. 2m backup to sling leads to 4m, 9m and 7m hangs on bolts. Bottom of drippy aven. Short passage on left ends, and water disappears into boulders – no way on.



Figure 19. Lizzie in the entrance of Starter for Ten Pot.

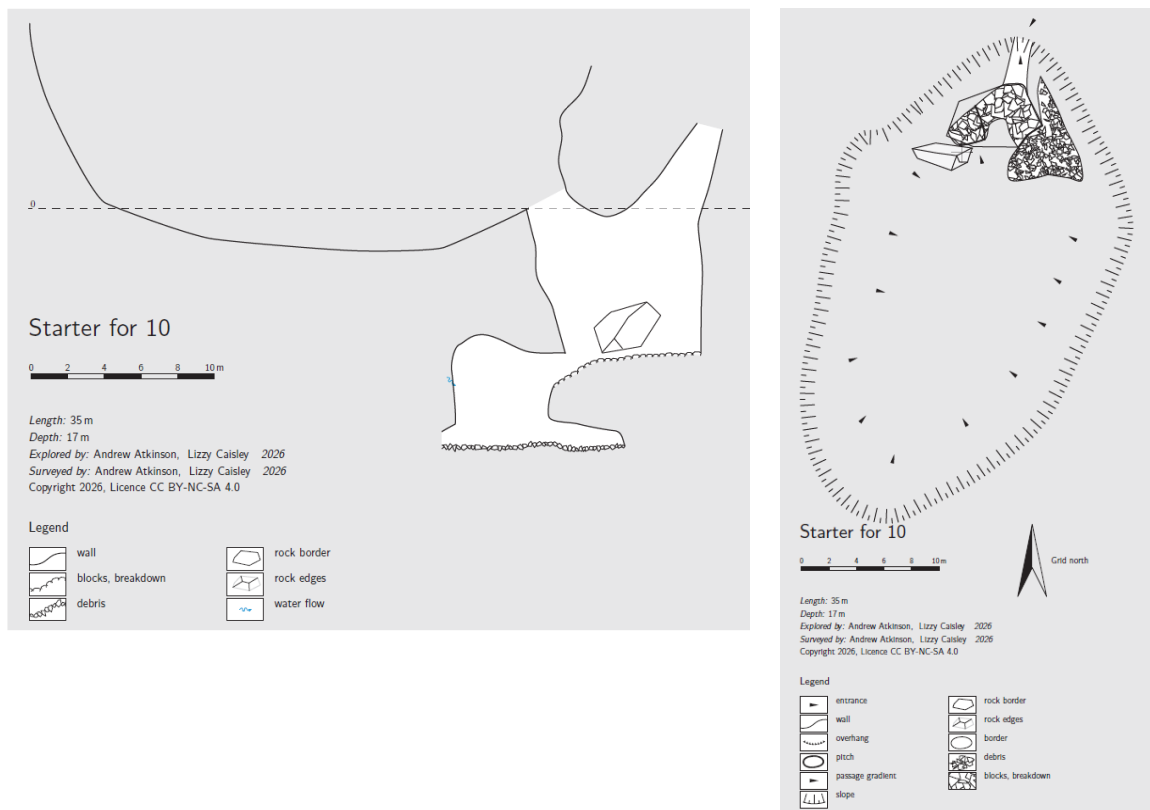


Figure 20. Survey of Starter for Ten Pot, showing elevation (left) and plan (right).

PT2 - Coordinates -6.05494°S -77.51029° W 3,464 m elevation

Hole under small cliff at base of depression reported in 2024. Nothing there, blocked with big boulder, no way on.

PT8 - Coordinates -6.05418°S -77.51159° W 3,464 m elevation [depth ~20m]

Hole at bottom of grassy sinkhole, 14m handline to an 8mn pitch. No way on or draft.

PT6 – Coordinates - 6.04932°S 77.50943° W 3,415 m elevation

Largest cliff in major depression also containing Golondrinatas to one side satellite images. Base of cliff has hole below very unstable boulders. No way on.

AA0 - Coordinates -6.06246°S -77.51389° W 3,419m elevation

5m pitch undescended – no rock to rig off.

AA1 - Coordinates -6.05741°S -77.51213° W 3,490m elevation

Probably dead.

AA23 -0 - Coordinates -6.045893°S -77.51230° W 3,463m elevation

No way on.

AA23 -1 - Coordinates -6.04677°S -77.51073° W 3,428m elevation

Shaft, needs rope. No draft. Shakehole next door may connect. Undescended. Not a good lead.

KT26-01 Coordinates - 6.05332°S 77.50308° W 3,438 m elevation

Needs an oversuit and handline, found to choke when visited again.

KT26-02 Coordinates - 6.05245°S 77.509299° W 3,449 m elevation

30m rope needed, but chokes.

KT26-03 Coordinates - 6.05068°S 77.50355° W 3,441 m elevation

2m drop goes under a cliff and loose boulder. Chokes.

KT26-04 Coordinates - 6.04732°S 77.50195° W 3,425m elevation

2m drop goes under a cliff and loose boulder. Chokes.

ND26-01 Coordinates - 6.05332°S 77.50308° W 3,439 m elevation

Slithered through into 5 x 5 m chamber, but chokes.

Megadoline (viewpoint from sidewall only) Coordinates - 6.04920°S 77.49896° W

A huge megadoline, undescended – and may need a portable chain saw at the bottom.



Figure 21. View into megadoline.

A Series of Unfortunate Events (originally called Jules' Big Hole): [located 15m from previous hole at - 6.05332°S 77.50308° W] 3,549 m elevation

2 x 2 m entrance sneakily hidden behind two boulders leads to a 34m pitch, with hangs of 22m and 12m. Lands on small rocks, with bones. Boulder slope down, and calcite slope back up (with 2 bolts), and calcite slope down to chamber with more bones (human skeleton). Second daylight shaft above - unable to locate on the surface. End is choked with boulders and mud, and no way on.

A Series of Unfortunate Events Cave

UTM 18M 222923 9330569
 Explored & surveyed 2026/08/22
 by Lizzie Caisley, Nat Dalton & George North
 BCRA Grade 5c
 Total depth: 40.52 m
 Total length: 65.99 m

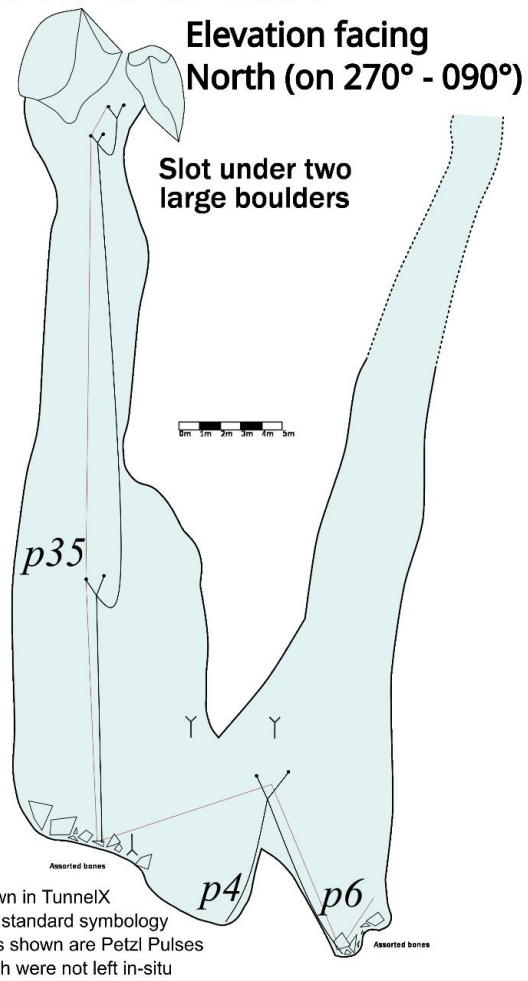
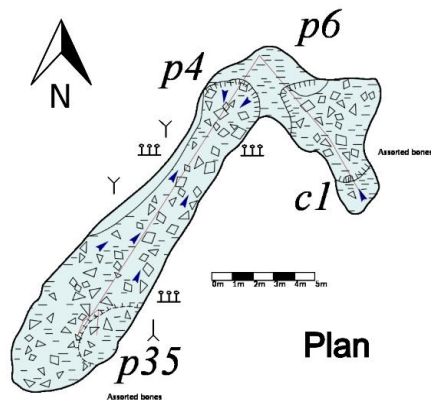


Figure 22. Survey of A Series of Unfortunate Events Cave, with plan (left) and elevation (right).



Figure 23. Entrance and initial pitch of A Series of Unfortunate Events Cave.

George's Medium Hole: Coordinates - 6.05332°S 77.50308° W 3,439 m elevation

Subtle hole beneath a limestone outcrop. Estimated to be 5m deep with no draft and lots of vegetation.

Oh Dear Cave: Coordinates - 6.04981°S 77.50136° W 3,405 m elevation

Down the valley through thick bush. 3m drop to a mud floor with deer (?) bones. Choked.

Caves in the major valley located to the South-East of Base Camp at Sink 2

Rob Dover's Draughting Cave (coordinates as yet unknown)

A video exists from an archaeological expedition that occurred over ten years ago, which shows a low cave entrance that leads to a ~60m deep shaft that remains undescended. It is reported that shaft draughts strongly. Rob Dover who was part of the impressive 2-person expedition, kindly provided estimated coordinates, as there were no GPSs available for that much older expedition.

After significant work (3 day-trips), this 2026 expedition established this cave entrance is unlikely to be near a prominent wooded re-entrant, where it had been estimated to be by Rob Dover. There are some shallow cave-shelters with pottery fragments in a cliff-line on the southern side of the entry to this re-entrant. Our best guess is that this currently elusive cave entrance is located further down the valley, perhaps in a couple of diagonally-sloping small cliff-lines. However, the original video only shows the inside of the cave and shaft, and it does not show the wider context of the entrance itself.

Chris Jones' Cave. Approx GR 6.08848 S, -77.49695 W. Approx Altitude 3520m.

Obvious entrance in the upper of 3 cliff lines on east side of the valley. 2 large arched entrances lead to an ongoing passage, well decorated with calcite. Inside the entrance there are two birds nests hanging from the roof. Roughly 15 meters into the cave, a 3m climb down drops into a chamber with a low passage to the right, and a climb up into ongoing passage straight on. A small loop can be completed within the cave. Cave fully explored, no way on.



Figure 24. Chris Jones' cave, including view out of entrance, and terminal calcite blockage.

Rift Cave / Cueva de Grieta: Coordinates: 6.09429°S, 77.49654° W 3400m [length 54 m; depth 23 m]

A steep side grassy shakehole identified by previous bolts installed in an adjacent boulder. However it is possible to climb down without starting the rigging at this point. Within the shakehole the cave proper is accessed leading quickly to a 12m pitch. There is a single thru bolt leading to a wide thru bolt Y-hang (pitch can be backed up to either the surface boulder bolts or vegetation within the shakehole). The base of the pitch offers no way on, but swinging off to an obvious ledge part way down accesses the rest of the cave. A further 3m drop (natural rigging) lands in a muddy pool and start of small awkward rift crawl. This emerges after only a few metres into a circular aven chamber with abundant popcorn. Upstream a rift exits but very soon closes down. Above, there maybe further rift development towards the many nearby shakeholes on the surface. Downstream is a narrow rift. An awkward section allows a constricted approach to a 8m pitch, rigged on 4 pulses with natural deviation. The only exit from the circular chamber at the base of the pitch is a short stoop to enlargement with tight slot in the floor. The slot can be descended (there is a good natural for a handline if required) into a pool at the bottom of a small chamber. Following the obvious route you reach a junction. Left takes you to an 8 meter mud passage ending in a choke. Right takes you into a small crawling rift, passing through a couple of pools shortly reaching a chamber. A climb up continues for a short distance but ends in a mud sump. A low tight squeeze in the chamber follows flowing water into a tight boulder tube going down - this may continue but was deemed too tight and wet to push. The cave ends downstream with water flowing into this tight boulder passage, and upstream (from the slot) in small mud filled passage. The cave draughts out, but no way on could be found. Hangers and nuts were removed from the thru bolts upon derigging.



Figure 25. Rift Cave entrance. The entrance is bigger than it looks...

Rift Cave, Watershed Valley

*Picos Del Oro, Granada
Peru*

Length: 54m; depth: 23m

Survey by L. Caisley, J. Carter, N. Dalton, C. Jones,
F. Loveridge, H. Moulton, P. Talling 2024 - 2026

Drawn by F. Loveridge 2026

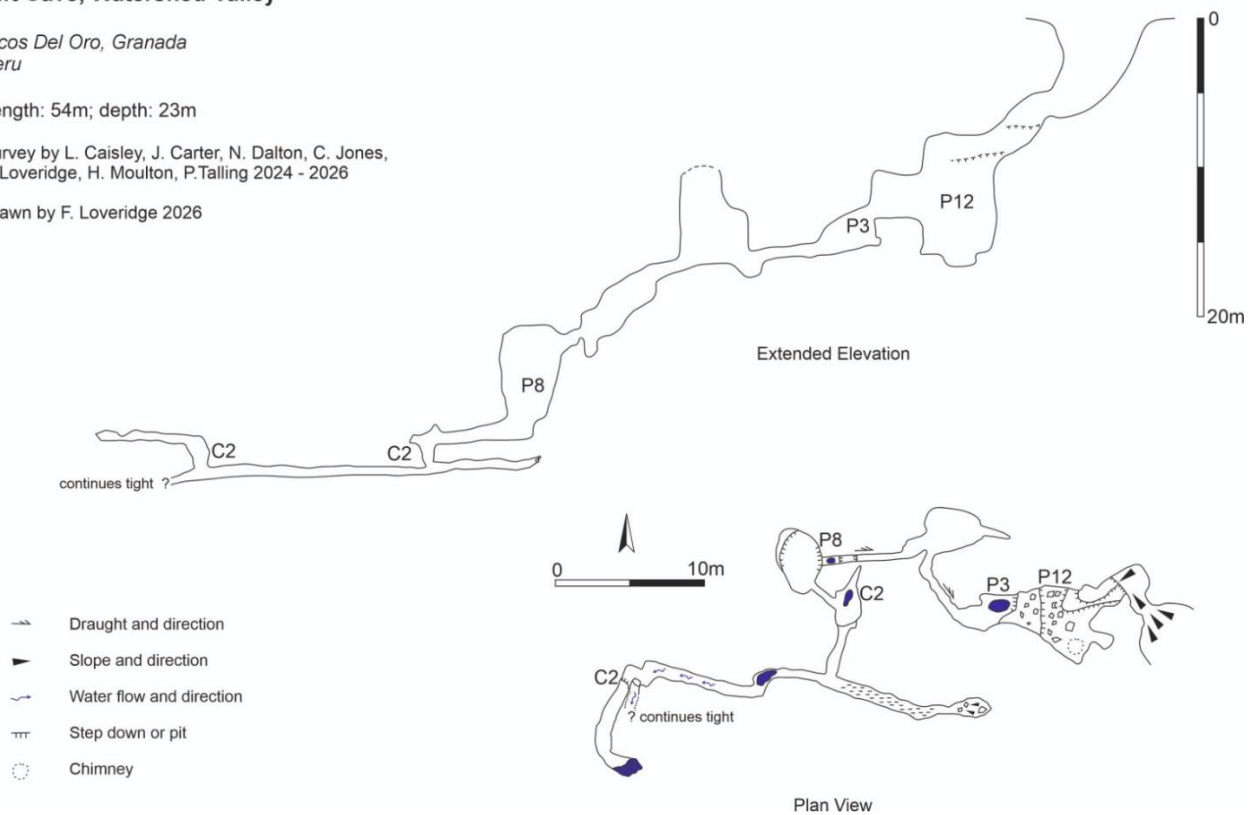


Figure 26. Survey of Rift Cave, with elevation (above) and plan (below)

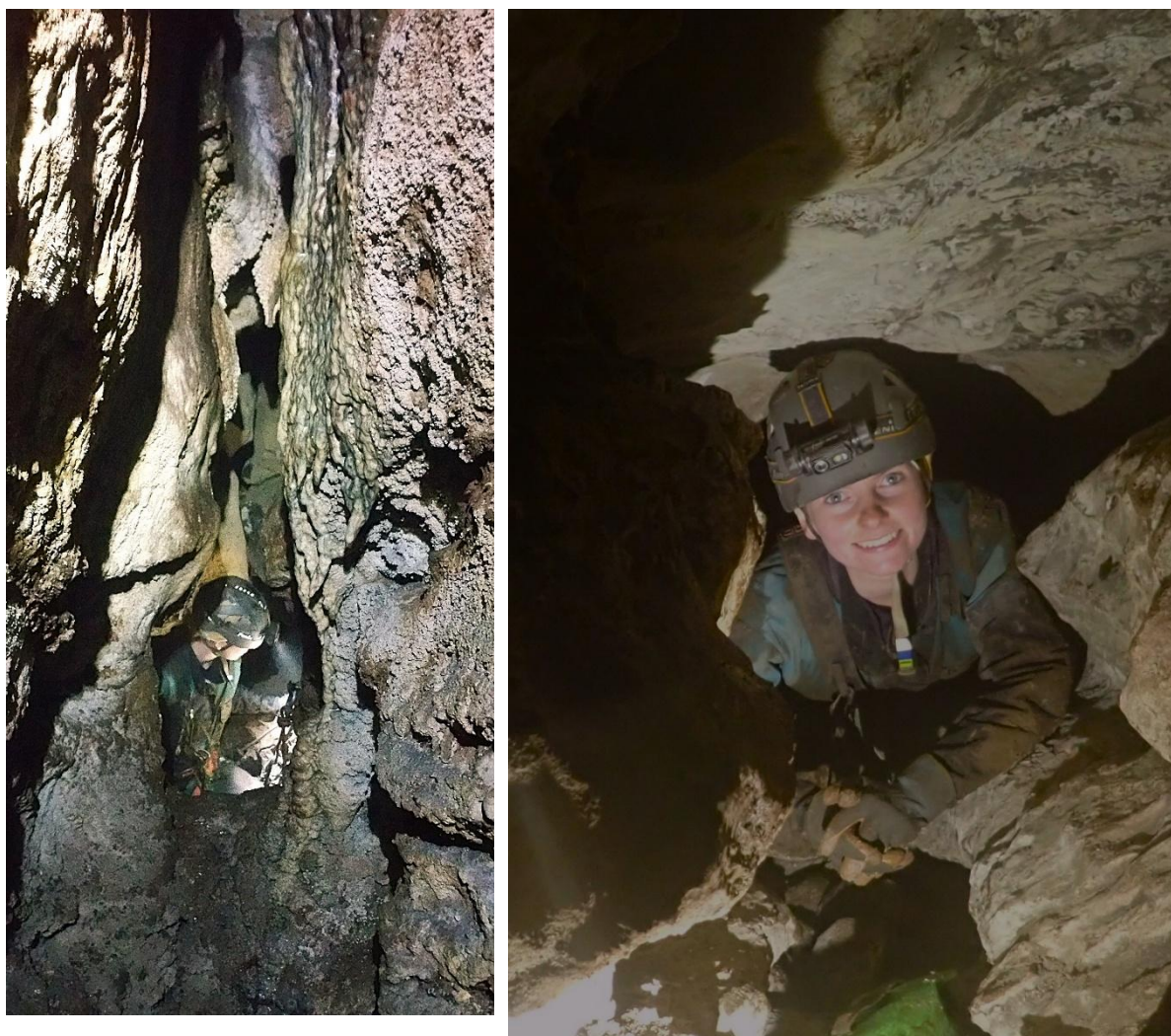


Figure 27. Lizzie Caisley in the extension of Rift Cave.

Caves on the large Spiky Mountain located to the East of Base Camp Sink 2

GN 26-03: Coordinates -6.08155° S -77.50416° W 3,568 m elevation

5m Pitch to enter 10m x 6m sloping rift, but completely choked.

GN 26-05: Coordinates -6.081305° S -77.50294° W 3,544 m elevation

18m pitch descended to floor of boulders. Small crawl led off with draught, but would need hammering.

GN 26-06: Coordinates -6.08236° -77.501888° W 3,537 m elevation

13 m pitch descended on ridge, but choked at base. No way on.

Ancestor's Cave / AA30-02: Coordinates -6.08363° -77.50153° W 3,502 m elevation

Phreatic cave entrance (visible for long distance) about 8m up steep grass slope. 20m pitch down at entrance was undescended. Bolt traverse over pitch led to boulder slope, at top of which was man made plinth, and human bones covered by lichen. The cave choked immediately beyond the bones. No way on. Pottery shards also seen in cave.

Kilo-doline (Pete's A lead) Coordinates -6.0765° -77.5054° W 3,552 m elevation*

Very large wooded doline, an impressive feature. Nat descended into depression, but no way on seen in dense undergrowth.

Caves near the 2026 Base-Camp at Sink 2

Tragadero de la Soledad (Bigger Sink): Coordinates = 6.0648° S 77.5153° W. Elevation = 3409m [length = 4,187 m depth = 323m]

This is the longest cave yet explored in Peru, and two small leads remained towards the end of the cave after the 2024 expedition. There may also be connections into the main cave from the Golondrinatas and Arba del Arco surface shafts. Please see the 2023 and 2024 Picos del Oro caving expedition for more details and a full survey.

However, two attempts to rig the cave found that the third small (15m) pitch in the entrance to be impassible with large amounts of water falling from above. The first attempt occurred during a period of heavy rain, but the second attempt was after a subsequent 3 days of relatively dry weather. The surface river was very high on the first attempt, but had subsided three days later. The entrance pitches were almost totally dry during numerous long caving trips in the 2023 and 2024 expeditions, in some cases after a day of heavy rain. We believe that this may be explained by the much wetter weather in 2024 leading to the pervasive boggy ground across this landscape becoming completely saturated by water, such that further rain immediately entered the rivers and cave. It is also possible that boulders have moved, such that the river is sinking in a new place.

Whatever the reason, any future teams that enter Tragadero de la Soledad may need a plan in case a team is trapped by floodwater in the entrance series.

Torridon View Cave / Cueva del Musgo: Coordinates - 6.07039° S 77.51538° W 3530 m [length = 137 m; depth = 72m]

The continuation of this cave beyond the entrance pitch was found to be too wet to safely continue in 2026, and also rather tighter than remembered from 2024.

Sink 3: Coordinates 6.0713° S 77.5112° W 3438 m 3,438 m elevation

This major river sink was revisited in 2026, and briefly dug with a crowbar. Water sinks (without backing up) into a tight space choked by cobbles and tree branches. But the conclusion was that this was a 'good Wednesday night dig' in the UK, but with no further progress possible on this expo.

Minor Sink in Dry Valley Near Sink 3 ('Dry Valley Hole') Coordinates 6.07110° S 77.51049°

Vegetated depression in dry valley about 100m from Sink 3. May be possible to rig, and gain access to Sink 3 streamway. Undescended.

GD26_03: Coordinates 6.07316° S 77.51067° 3,441 m elevation

Vegetated depression in dry valley about 100m from Sink 3 Descended by Gareth with body belay from Kai and Tonio. No way on.

Hole on hill above Sink 3: Coordinates 6.07110° S 77.51049° 3,443 m elevation

Small (< 10m) hole near a pond, on hill directly above Sink 3. Not a good prospect.

Caves above upstream continuation of Tragadero de la Soledad

Last Chance Saloon Pozo: Coordinates 6.060095° S 77.520284° Elevation = 3,528 m

Well placed surface entrance directly beyond, and about 200m away from, the terminal upstream, boulder choke in the largest (Pisco and Codeine) streamway in Tragadero de la Soledad. Located at the base of a small cliff. Entrance located at base of small cliff (Fig. 24). Initial 15-20m pitch reaches a muddy inclined base, followed by a crawl through a narrow tube with bones, into a well decorated chamber (The OK Corral). Various routes down can be found. The main route is the other side of a stalagmite pillar, meeting a 5m calcite slope leading to head of a 25m pitch. At the bottom of the pitch, a 6m roped climb down leads to what initially looks like a calcite blockage. This can be squeezed through (easiest feet first) for 4m, and gains a 3m ledge before the head of a grand 45m pitch (Fig. 25).

A large calcite platform is landed on, with an undescended hole in the floor. A traverse around the left wall leads to the take off for the 20m drop below. At the bottom of this pitch, there is a further 6m pitch leading to a 42m pitch with a smaller pitch head (Fig. 26). This is immediately followed by a 25m pitch, and then a further 60m down a steeply hading fault-rift, split by rebelay at ledges. The bottom of the shaft becomes quite drippy and there is abundant calcite lower down.

At the base of the final drop, an impressive canyon passage is reached, which passes below a high aven. A couple of short drops on a calcite floor lead to the head of an undescended pitch estimated to be 6-8m deep. The large canyon looks to continue beyond, and is as yet unentered..... (Fig. 27).



Figure 28. Entrance to Last Chance Saloon Pot.



Figure 29. Looking up the 6m and 20m pitches in Last Chance Saloon.



Figure 30. Lower 45m pitch in Last Chance Saloon.



Figure 31. The final 7m pitch in Last Chance Saloon that is undescended, which continues as a large and enticing rift passage. It is located close to the upstream choke in Last Chance Saloon, and at the same height.



Figure 32. Survev data centre-line showing that the undescended pitch at the bottom of last Chance Saloon Pot (left) is 237 m laterally and 9 m lower than the top of the boulder choke at the upstream end of the Pisco and Codeine Streamway in Tragadero de la Soledad. This is by far the largest of the two streamways in Tragadero de la Soledad, and it must drain a large area including surface sinks.

Last Chance Saloon

UTM 18M 221024 9329504

Explored & surveyed 2026/08/31 to 2026/09/01

by Andrew Atkinson, Lizzie Caisley, Jules Carter, Nat Dalton, Gareth Davies, George North, Sarah Parker,

Tonio de Pomar Cáceres, Pete Talling, Kai Trusson

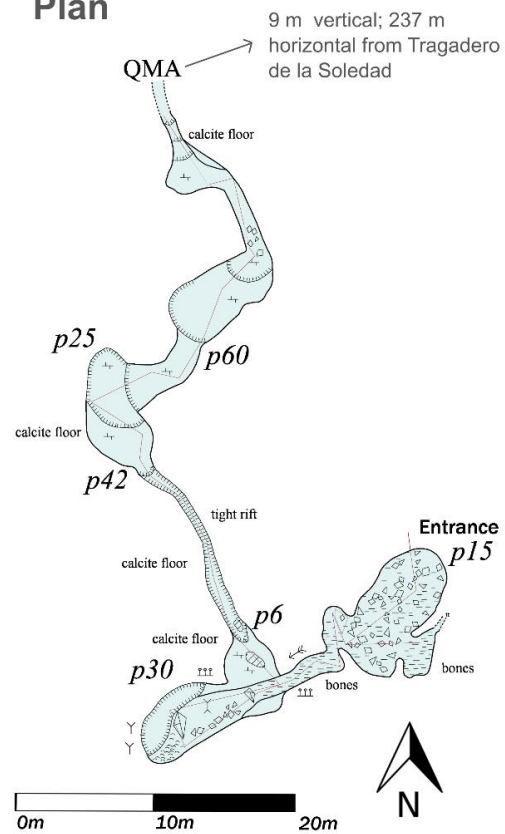
BCRA Grade 5c

Total depth: 197.12 m

Total length: 252.61 m



Plan



Elevation facing west (280°)

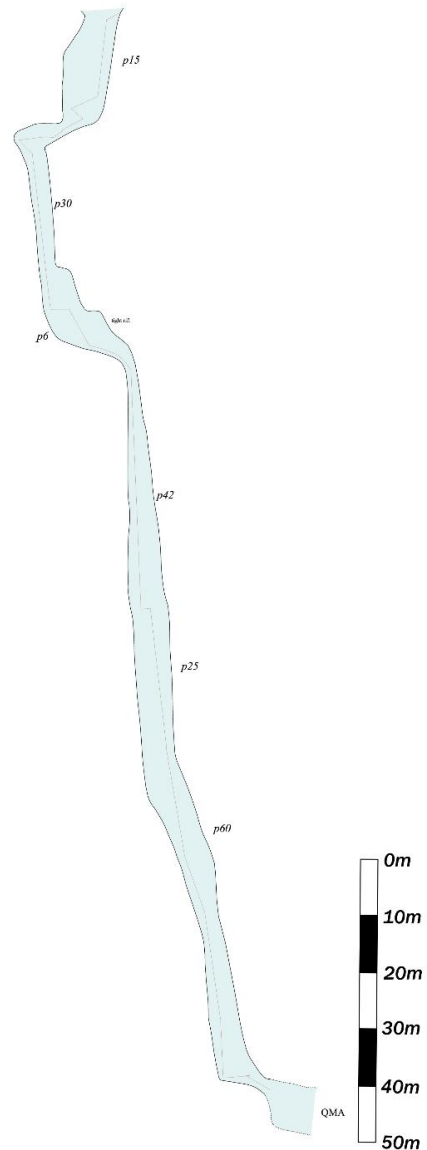


Figure33. Survey of Last Chance Saloon, with a photo of the entrance, and plan and elevation.

Expedition Budget: Income and Expenditure

INCOME	
Ghar Parau Foundation sponsorship	£1,300
Mount Everest Foundation sponsorship	£4,500
	Total = £5,800
EXPENDITURE	
Hire of Horses and Guides to Transport Equipment onto Plateau	£2,207
<i>Equipment</i>	
Rope and Rigging equipment (bolts, hangers, maillons etc)	£2,675
Extra bags on flights to carry equipment and food to Peru	£476
<i>Food</i>	
Dehydrated meals (Adventure Nutrition)	£1,179
Other food from UK	£716
Food bought in Chachapoyas	£1,316
<i>Communications and Power</i>	
Communications (Garmin InReach Satellite Phones)	£40
Solar power system to charge batteries	£143
<i>Travel and Accommodation</i>	
Buses to/from Granada/Chachapoyas and Lima/Chiclayo/Cajamarca	£1,244
International Flights (£1,250 x 14 international cavers)	£17,500
Accommodation in Chachapoyas (£18 x 15 cavers x 2 nights)	£540
<i>Miscellaneous</i>	
Peruvian cavers support	£231
	Total = £28,267

<i>Original Estimates (based on 15 persons; 14 international and 1 Peruvian caver)</i>	
International flights (UK/EU to Lima) – 14 cavers	51.35 tCO ₂ e
Internal flights (Lima to Chiclayo or Cajamarca) – 14 cavers	5.5 tCO ₂ e
Local buses (Chiclayo or Cajamarca to Chachapoyas and then to Granada) –15 cavers	0.083 tCO ₂ e
<i>Carbon Footprint of Expedition (15 persons; 14 international and 1 Peruvian caver)</i>	
International flights (UK/EU to Lima) – 14 cavers	51.35 tCO ₂ e
Internal flights (Lima to Chiclayo or Cajamarca) – 14 cavers	5.5 tCO ₂ e
Local buses (Chiclayo or Cajamarca to Chachapoyas and then to Granada) –15 cavers	0.083 tCO ₂ e

Utilising the myclimate.org portal

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Figure 34. Fleur Loveridge climbing towards the top of the Spiky Mountain behind our base camp.