CUEVA MOLINO, Arredondo, Cantabria

23-08-11 Support: C Jewell, A Kozlowski, S Cornhill, D Arthurs, S Martin

With assistance from the sherpas all kit arrived at dive base very efficiently and the divers assembled their gear near the water in order to make kitting up the next day as easy as possible. Everyone was aware of the issues Ruper Skorupka previous faced when the cave flooded so kit was tied together and kept 2-3m above the water line.

24-08-11 DIVERS: C JEWELL, A KOZLOWSKI,

Overnight the drizzle was persistent and when the divers entered the cave the following day there was noticeable more water around. Approaching the sump the usual stream could not be heard and instead it was eerily silent. Descending the slope to the sump pool straight away CJ could see his kit just below the surface of the water with rebreather hoses floating on the surface. AK's kit was slightly deeper but everything was in exactly the same place as the divers had left it and there was hardly any visible flow in the now partly submerged chamber. AK donned his drysuit to retrieve the kit whilst CJ stashed it further up the slope. Despite the flooding the visibility still looked good and the water level was marked. AK needed to remove his rebreather as the sofno was wet so the divers made a quick trip back to Matienzo for another fill and some lunch. Several hours later back at the sump the decision to dive was made as the water level was dropping slowly.

Oxygen bailout (Ali80) and underwater mp3 player were dropped at 9m incase this was only 6m on the way back and an Ali80 of EANx 50 was also staged for deco bailout. Both divers were using their usual rebreathers plus CJ dived with one 12ltr of EANx32 and one 12Ltr of TMx 12/50 whilst AK had two Ali80's of TMx for bailout. All these bailout cylinders were regarded as communal should the worst case scenario happen.

On route to the end of the line at approximately -60m CJ retrieved a survey slate and after establishing that AK had not just dropped it presumed it was R. Skorupkas from 2007 (or earlier). Taking a few survey notes on the way it was only after the first new belay that the diver realised AK was laying line – having picked up RS's old reel from under a rock he'd simply carried on swimming. Now down at -85m and after about 80m more diving this ran out and AK tied on his own reel. The depth increased steadily with an elbow in the sump being reached at -96m. After a slight ascent to -93m CJ grabbed AK's fin and indicated that they ought to be heading back as his dive computer was already showing 2hours of decompression – and they still needed to go back through the deep section. The line was tied off and an uneventful exit made. During the deco stops the visibility was average as the divers could not avoid disturbing the gravel silt mixture on the floor of the steeply ascending passage heading up to surface. The water temperature was an acceptable 11 degrees and heated vest and mp3 player were put to good use. After a total dive time of 3 hours a jealous CJ watched AK head out whilst he had another 30mins to go. In total 125m of new line was laid on this dive and a pair of tired divers made it too the bakers bar just in time for a midnight snack with waiting friends.

26-08-11 DIVERS: C JEWELL, A KOZLOWSKI,

After using their 'rest' day to swap kit and carry in two more bailout cylinders the divers were back at the sump and ready to go again. An extra Ali80 of TMx and some EANx60 were taken underwater along with the

other bailout cylinders – all of which had been brought back from the previous dive as leaving them insitu risked not being able to get them back if the weather turned. CJ had decided to limit his dive to a small extension into new territory in case the sump started to rise sharply and concentrate on getting some good survey data. AK on the other hand grabbed all the spare line he could find (400m) and headed for the end of the line. Despite CJ doing a quick survey job on the way down the divers ended up at their previous limit at the same time, where the extra Ali80 of TMx was staged. Water levels were slightly lower making the elbow of the sump -93m. After 30m of new line was laid CJ felt he'd stayed long enough and the depth was still - 85m with no sign of rising. AK carried on and the cave did begin to rise steadily. After about another 100m he was at -60m and reached what appeared to be a blank wall. After a brief look around the only way was up! A fine shaft was ascended for close to 30m where the roof was encountered before the diver found the side passage heading off horizontally. Using up his remaining line he followed this until the depth reached -12m. Having laid 400m of new line AK turned back and surveyed out until the TMx bailout cylinder was reached.

CJ was at -6m when AK arrived at -9m and after clearing his decompression obligations he went to retrieve the unwanted TMx cylinders and carry them out. Total dives were 4hrs 15 and 6 hours 15 respectively.

Although survey data was captured on two dives many of the old tags on the older line were illegible and new sections of line had been started frequently. Combined with depth changes due to water levels compared to older data it was very difficult to tie the new survey in with the older one. Whilst the overall accuracy of the final survey is in doubt the data does however provide a reliable general trend which shows the cave is heading towards the Orcones system. This cave is being explored by a French team who have been diving several sumps there.

27-08-11 Support: C Jewell, A Kozlowski, J Corrin, I Chandler, J Davis, J Dickinson, A Quin, P Smith

A veteran team of Matienzo cavers was assembled by JC for the carry out which the divers greatly appreciated. Kit was moved quickly and efficiently out of the cave before the team retired to the local bar so CJ could buy some drinks to say thank you.