P/56/23/PL – DOC #15 – Groundwater Monitoring

Dove Associates – John Adlam – 26th March 2024

Additional comments to the report from Constructive Evaluation – 18th March 2024

1) As the report explains the period of testing was during the wettest period the area has experienced for many years and exceeded most of the average rainfall figures. The high levels of clay in the subsoil as shown in the log, indicate that percolation of the rain would be very slow to the lower profiles.

   The UK Hydrological summary for January stated listed four named storms and that the rainfall for December – January was 150% of the average rainfall. The February summary also mentioned that England was the wettest October to February since records were started in 1890. The groundwater levels at Chilgrove House rose by 10 meters and moved from above average to exceptionally high.

   It is of interest to note that the ditch between the Newlands site and the Butterlees site did not show a high flow throughout the period of testing. This is a deep ditch and with the soil level shown on the Topographical survey at 5.34m at the Test Hole site the ditch between the two fields has an invert of 3.77m. Throughout the test period the ditch had very little flowing water and shows no signs of having been at the height of the test hole dip.

   There was no mention of Barometric Pressure on the dates of dipping, which is unlikely to be of any major significance in the scale of things but can cause minor variations in bore hole water levels.

   Taking into account the water logged field in which the test hole was drilled and the fact that the surrounding ditches where just under 2 metres lower than the test hole measurements, it would suggest that the test well figures exaggerate the ground water level due to the excessive surface water that has not percolated and is perched on the clay. The test hole did not fill up when drilled in October which also points to a normally lower ground water level.