

# Report on a Mining Investigation:

Tennis Court Site, The Croft  
Trevaunance Road  
St Agnes. TR5 0NB

27th May 2020

Revised 22nd July 2020

Client: Lian Doble

Summary: Site heavily affected by mining. Three shafts on site and a worked lode outcrop. All features backfilled. Shafts require excavation and capping and development should only take place within area delineated on plan (indicating sufficient competent rock to support a building).

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## **1. Introduction and Summary of Works Remit.**

**1.1** A mining search was not undertaken of the property as it is known that the mine plans and area mining maps are highly incomplete and not useful for impetration of features. A series of flat dipping lodes exist in the area and a major one (Trevaunance Lode) comes to the surface in the vicinity. There are many tips and shafts and the tennis court plot was formerly a spoil heap; the tennis court was made by landscaping a spoil heap and dressing it with tarmac. Two areas of subsidence within the site were noted and the drilling investigation on the plot revealed a considerable number of filled voids. Those linked to the visual areas of subsidence appear to be vertical shafts and the other intersections appear to be backfilled workings (stopping). Borehole A7 intersected a void at 14m which was venting and this is consistent with a feature linked to major workings (perhaps a shallow tunnel connecting with a shaft). The workings have been entered and explored by ourselves along Trevaunance Lode. It was not possible to climb into the area beneath the tennis court and in much of the workings a pillars exist, suggesting that the workings associated with the tennis court are shallow outcrop workings which have been backfilled. The initial drilling was projected to take two days, however as more features were revealed six days where in fact required with a total of seventy two boreholes drilled.

### **1.2 The aims were as follows:**

1.2.1. To drill a series of vertical boreholes to prove the integrity of the ground beneath the proposed footprint.

1.2.2. To investigate the causes of the visible subsidence.

1.2.3. To form a coherent picture of the layout of the workings and how that impacts development of the site.

### **1.3 Pre-works operations**

The pre-works operations undertaken by Mining Eye Ltd, consisted of a site visit prior to the drilling investigation to observe the position of services and to consider access and placement of machinery.

### **1.4 Findings:**

1.4.1 A thin layer of tarmac is underlain by a thickness of mine waste. The bedrock underneath is irregular in height, probably due to pitting and exploration work. Considerable areas of fill occur to the South-east corner of the site and this appears to be the outcrop of the workings which are of considerable size in certain cases.



- 1.4.2 Apart from the area of outcrop along the South-east edge of the site, much of the site has been proven to have an adequate thickness of rock for development to take place (Rock thickness in excess of 11.3m).
- 1.4.3 The areas of subsidence correspond to two vertical shafts. They are not thought to be hosted within an additional mineralised structure. The workings within the site appear to be associated with Trevaunance Lode.

## **2. Limitations.**

- 2.1** Although a very thorough investigation was undertaken, the site was not covered to the degree that very small features were all located. These are very unlikely to be significant if they are revealed, however sufficient time to drill from the adjacent field and map the outcrop of the lode in this direction was thought unnecessary as this is distant from the desired location of the building. This feature is thought to be stable and should be left alone.

## **3. Additional Concerns raised by the investigation.**

- 3.1** N/A

## **4. Drilling Investigation.**

### **4.1 Methodology.**

The drilling investigation initially set out to define the areas of subsidence with a view to assigning a rough cost of their remediation. The next boreholes were to prove the integrity of the ground beneath the site and ascertain where a building would be best placed if mine workings were encountered. Additional drilling revealed more features including an additional shaft and a possible lode outcrop to the South-east of the site. This needed to be resolved sufficiently to understand the nature of the workings. Following the location of these features vertical boreholes were drilled to prove a sufficient thickness of rock above workings to support the built structure.



## **4.2 Discussion.**

### **4.2.1 Overview.**

The boreholes were drilled as outlined in the attached plan. The bedrock is a soft mudstone which is shattered and weathered at surface. There is a good thickness over much of the site and this is suitable for building to take place. The workings encountered suggest relatively shallow shafts into Trevaunance lode at depth and irregular outcrop workings with various pillars. It is a complicated site and under the area of mine waste, the rock horizon varies considerably (by several meters) this is likely to be associated with historic excavations for machinery, buildings and mineral prospecting/mining.

### **4.2.2 Soils.**

The site is largely covered by a layer of Tarmac. Beneath this, a thickness of mining spoil overlies the bedrock and also fills the mining features.

### **4.2.3 Bedrock.**

The bedrock consists of clay slate of the Porthtowan Formation. In this area, it is highly variable in colour but is consistently weathered at the surface (chippy returns) and although competent is quite a soft rock (meta-mudstone). Over much of the site, apart from the shafts and mine workings, a good cover (11.3m+) of this rock occurs in a vertical thickness.

### **4.2.4 Mine Workings.**

Three shafts occur within the site. Two of these appear to be vertical and are of typical size for the area circa 1.8x1.2m. The shaft in the North-east of the site seems to be slightly inclined. The outcrop of Trevaunance lode appears to follow the South-west edge of the site (slightly beyond it). Backfilled workings rise from the North-west and the outcrop takes the form of very large areas of fill to a depth in certain cases of 11m. Following exploration of the mine workings underground (entered from Park Shaft to the North) it appears that these surface workings do not connect to those at depth (a boundary pillar may be present).

### **4.2.5 Notes Regarding Borehole drilling and logging procedure.**

A Holman Unitrack mini-rig was used for the investigation. This was fitted with a down hole hammer operating a 80mm button headed bit. Air was fed at up to 220PSI from an Ingersoll Rand 450CFM compressor. Typical residual pressure hammering in competent bedrock is in the order of 175PSI.

The hammer is measured from the shield mount to the tooling joint as this varies between holes. Following drilling the hammer, 1.5m rods are added until the desired depth is reached, or further drilling is not possible, due to the intersection of workings and loss of flushing air and the blocking of the borehole.



The factors recorded are as follows:

Penetration:- 0-5. Very solid bedrock, slow penetration (5) Void, no resistance (0).

Hammer:- 0-5. The hammer is very noisy in solid rock (5) and silent in a void (0).

Flush:- 0-5. Full flush (5) and flush lost in a void (0)

Returns:- 0-5. Full returns as expected with the degree of penetration and flush (5). Returns lost (0).

Other factors in "notes" include the colour of returns, type of rock (if identifiable), intermittent or unusual hammering, the presence of water, voids and their approximate start and finish measurements and whether or not fill is present in a void.

When a void is struck and the flush and returns are lost, it is usual procedure to drill and extra rod (1.5m) and then check the withdrawal rate before attempting another rod. It is commonplace to abandon the hole before 3m after loss of flush/returns.

### **4.3 Conclusion**

- 4.3.1 The proposed building footprint will be affected by the two shafts. There is a further shaft close to the lode outcrop and maybe within the wall of the stope feature.
- 4.3.2 The South-west edge of the site hosts outcrop workings associated with Trevaunance Lode.
- 4.3.3 Although the rock is relatively soft, there is a good thickness encountered in various boreholes. This has allowed us to produce a map showing where the building should be sited and which features need to be remediated. Note; green line on the plan.

### **4.4 Recommendation.**

- 4.4.1 The two main shafts associated with the areas of subsidence will need to be excavated and either capped with reinforced concrete slabs, or mass concrete plugs. Due to the softness of the bedrock, it is likely that upon excavation the "cleaning off" of the shafts will suggest MC Plugs are used. Both of the other shafts should be excavated and stabilised. It is recommended that the outcrop workings are not excavated and remediated and the building is sited at a suitable distance from these. Following underground exploration, it appears that these workings are not connected to the main mine. As a result, catastrophic collapse is very unlikely but some minor settling may occur. Excavating these workings and capping them adequately (to highways standard at a minimum) would be a very large and unnecessary expense.



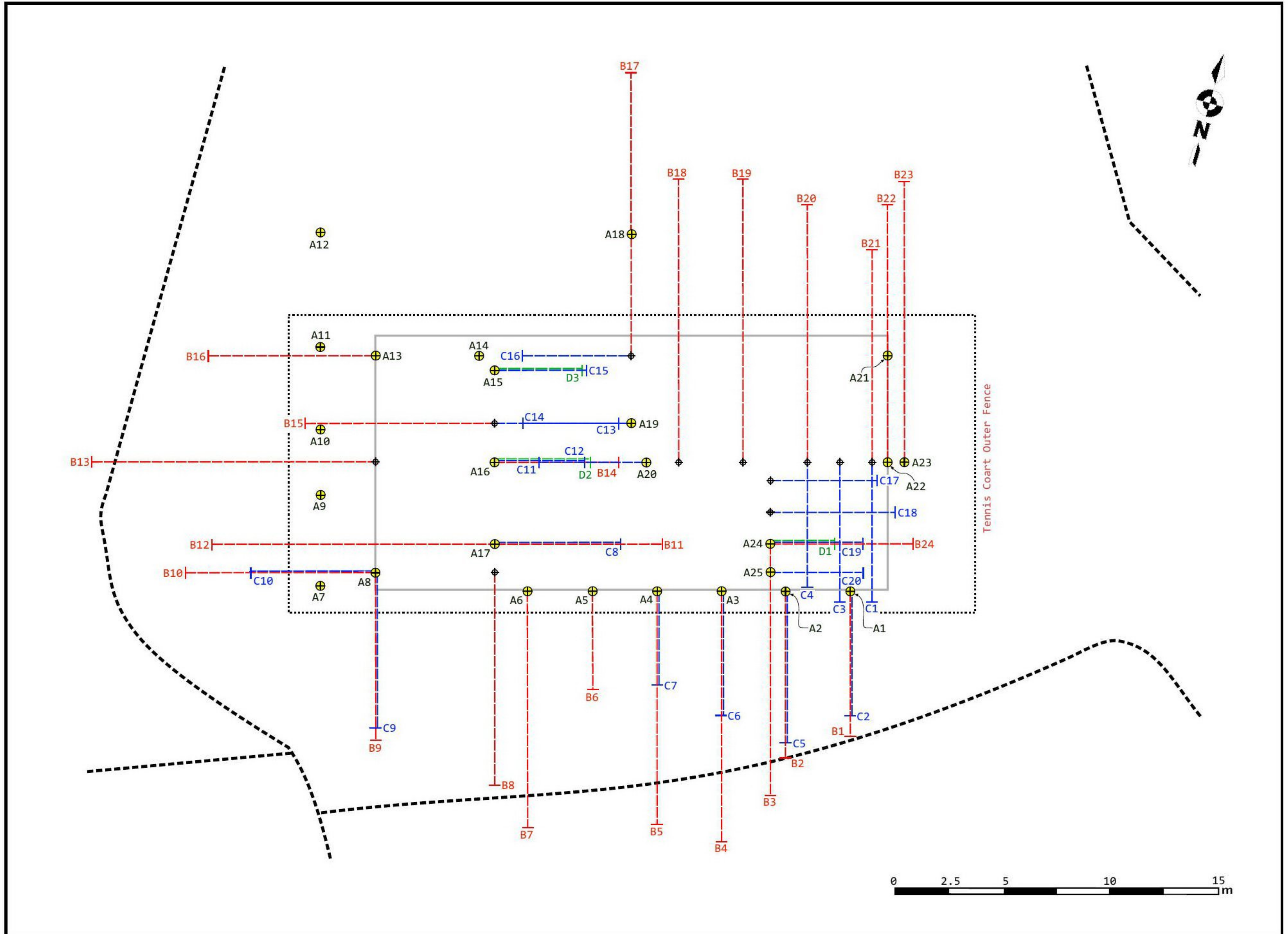
- 4.4.2 No further investigatory work is required at this stage. The tarmac should be removed from the site and the tip material excavated around all three of the shafts. This will involve the removal of about 3-4m of material to rockhead. It is worthy of consideration that several large excavations are going to be required in close proximity to each other. At this point, it would be wise to remove the whole area back to rock head and following fixing the shafts, inspect the rest of the footings for mining features. The alternative where the tennis court ground height is retained is likely to require a piled design which would entail considerable expense and work.

Tennis Court Site.  
The Croft, St Agnes:  
Plan of Borehole  
Positions

Date of Plan: 27.05.2020  
Revision v2.0: 22.07.2020  
Drawn: T.Thomson  
Checked: S.Dann

- A1 ⊕ Vertical [90 °] Borehole
- B1 | 45 ° Inclined Borehole
- C1 | 60 ° Inclined Borehole
- D1 | 75 ° Inclined Borehole

**Note:** Boreholes of differing inclinations shown offset for clarity.

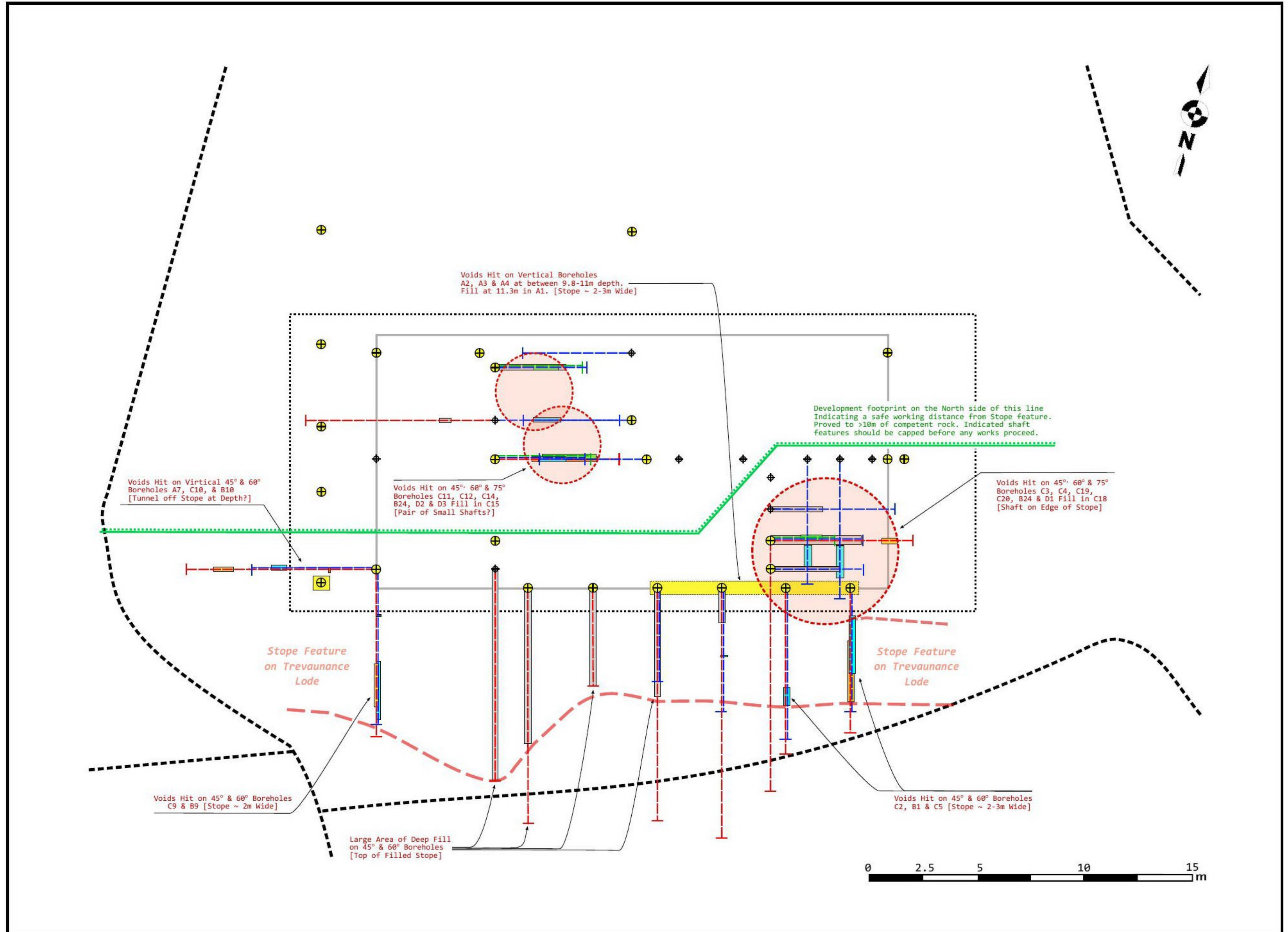




Tennis Court Site.  
The Croft, St Agnes:  
Plan of Interfered  
Mining Features from  
Borehole Data

Date of Plan: 27.05.2020  
Revision v2.0: 22.07.2020  
Drawn: T.Thomson  
Checked: S.Dann

- Void on Vertical Borehole
- Void on 45° Borehole
- Void on 60° Borehole
- Void on 75° Borehole



## Appendices:

5.2 Drilling Logs



Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: A1 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED VOID</b>	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate . Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	<b>FILLED VOID AT 11.3m</b>	
11.7-13.2	1	2int	0	0	<b>FILLED VOID (2.5m wide)</b>	
13.2-14.7	1	2int	0	0	<b>ROCK AT 13.7</b>	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: A2 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED VOID</b>	Sum'y
0-1.2	3	3	0	0	Tarmac, then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate. Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	
11.7-13.2	1	2int	0	0	<b>FILLED VOID at 12m</b>	
13.2-14.7	1	2int	0	0	<b>VOID Total thickness 2.3m</b>	
14.7-16.2	3	3	0	0	<b>Rock at 14.3</b>	



Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: A3 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	2	0	0	Tarmac, then soil, then into FILL until 4.2m	
1.2-2.7	3	2	0	0	<b>FILLED FEATURE</b>	
2.7-4.2	3	2	5	5	...	
4.2-5.7	3	4	5	5	Rock at 4.2 (weathered/chippy) to end of hole.	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: A4 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED VOID</b>	
0-1.2	3	3	0	0	Tarmac, then soil, then grades into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.4m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate. Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	Pale/soft	
10.2-11.7	3	4	0	0	<b>Into FILLED VOID at 11m</b>	
11.7-13.2	1	2int	0	0	<b>FILLED VOID</b>	
13.2-14.7	1	2int	0	0	<b>FILLED VOID with 0.5 rock then FILLED VOID</b>	
14.7-16.2	3	3	0	0	<b>ROCK AT 15.6m</b>	
					<b>Filled void is about 4.5m in this dimension</b>	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A5 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED VOID</b>	
0-1.2	3	3	0	0	Tarmac, then soil, then grades into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.4m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate. Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	<b>Into FILLED VOID at 9.8m</b>	
10.2-11.7	3	4	0	0	<b>VOID TO END OF HOLE (hole abandoned)</b>	
11.7-13.2	1	2int	0	0	<b>Over 6m of void (internal shaft?)</b>	
13.2-14.7	1	2int	0	0	...	
14.7-16.2	3	3	0	0	...	



Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: A6 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate . Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	Crack here. (0.1m wide, flush not lost)	
11.7-13.2	3	4	5	5	...	
13.2-14.7	3	4	5	5	...	

Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: A7 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED VOID</b>	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate to end of hole. Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	
11.7-13.2	3	4	5	5	...	
13.2-14.7	1	2int	0	0	<b>Filled VOID about 14.3m</b>	
14.7-16.2	1	2l	0	0	<b>Rock for 15m-15.50 then filled VOID</b>	
16.2-18.7	1	2l	0	0	<b>Rock at 16.5 to end of hole.</b>	



Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A8 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac, then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate to end of hole. Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	

Logged By....SD.....

Date: 07/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A9 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	2	0	0	Tarmac, then soil, then into weathered rock at 1.5m	
1.2-2.7	3	2	5	5	Grades into better rock, still soft.	
2.7-4.2	3	2	5	5	...	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	



Logged By....SD.....

Date: 07/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A10 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	2	0	0	Tarmac, then soil, then into weathered rock at 1.5m	
1.2-2.7	3	2	5	5	Grades into better rock, still soft.	
2.7-4.2	3	2	5	5	...	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	

Logged By....SD.....

Date: 06/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A11 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	2	0	0	Tarmac, then soil, then into weathered rock at 1.5m	
1.2-2.7	3	2	5	5	Grades into better rock, still soft.	
2.7-4.2	3	2	5	5	...	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	



Logged By....SD.....

Date: 07/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A12 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	2	0	0	Tarmac, then soil, then into weathered rock at 1.5m	
1.2-2.7	3	2	5	5	Grades into better rock, still soft.	
2.7-4.2	3	2	5	5	...	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	

Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A13 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac, then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate to end of hole. Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	



Logged By....SD.....

Date: 07/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A14 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 1.6m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate . Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	
11.7-13.2	3	4	5	5	...	

Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A15 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac, then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.3m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate to end of hole.	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	



Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A16 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac, then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.5m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate to end of hole.	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	

Logged By....SD.....

Date: 25/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A17 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac then soil/weathered rock	
1.2-2.7	3	3	0	0	Weathered rock at about 2.3m	
2.7-4.2	3	3	5	5	...	
4.2-5.7	3	4	5	5	Red returns	
5.7-7.2	3	4	5	5	Cocoa coloured cuttings (chippy)	
7.2-8.7	3	4	5	5	Consistent to end of hole	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	
11.7-13.2	3	4	5	5	...	

Logged By....SD.....

Date: 07/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A18 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- Find Rock	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft) End of hole (good rock)	



Logged By....SD.....

Date: 07/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A19 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 1.6m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate . Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	
11.7-13.2	3	4	5	5	...	

Logged By....SD.....

Date: 06/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A20 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.8m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate . Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	
11.7-13.2	3	4	5	5	...	
13.2-14.7	3	4	5	5	...	

Logged By....SD.....

Date: 06/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A21 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- Finding rock in the NW corner	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.4m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate . Reddish returns	



Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A22 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac, then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate to end of hole.	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A23 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- 70 seconds to drill 1 rod.	Sum'y
0-1.2	3	3	0	0	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.6m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate . Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	
11.7-13.2	3	4	5	5	...	

Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A24 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	5	5	Tarmac , then soil, then into weathered rock	
1.2-2.7	3	3	5	5	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate to end of hole. Reddish returns	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	



Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: A25 Azimuth: -° Inclination: 90°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1.2	3	3	0	0	Tarmac, then soil, then into weathered rock	
1.2-2.7	3	3	0	0	Better rock at 2.2m (still soft)	
2.7-4.2	3	3	5	5	Moderately soft clay slate to end of hole. Chippy cuttings	
4.2-5.7	3	4	5	5	...	
5.7-7.2	3	4	5	5	...	
7.2-8.7	3	4	5	5	...	
8.7-10.2	3	4	5	5	...	
10.2-11.7	3	4	5	5	...	

Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B1 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- Filled stoping	Sum'y
0-0.5	3	2	0	0	Tarmac then SOIL/FILL	
0.5-2	3	2	0	0	...	
2-3.5	3	2	5	5	Rock at 2.7m (down hole)	
3.5-5	2	2	2	2	Filled FEATURE at 3.5m (4m wide down hole)	
5-6.5	2	2	0	0	...	
6.5-8	2	2	0	0	Rock at 7.5m to end of hole.	
8-9.5	3	4	0	0	...	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B2 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	2	5	0	Tarmac then SOIL/FILL	
0.5-2	3	2	0	0	ROCK at 1.8m to end of hole (weathered clay slates).	
2-3.5	3	4	5	5	...	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	



Logged By....SD.....

Date: 26/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B3 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	2	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	ROCK at 1.2m (stick up bit?)	
2-3.5	3	3	5	5	Buff coloured returns (chippy/slightly weathered) to end of hole.	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	

Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B4 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	...	
2-3.5	3	3	5	5	Rock at 3.5m (down hole) to end of hole.	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	
14-15.5	3	4	5	5	...	
15.5-17	3	4	5	5	...	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B5 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- Surface FEATURE OUTCROP PIT?	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	2	2	0	0	LOOSE FILL (SURFACE FEATURE?) to 7m	
2-3.5	2	2	0	0	...	
3.5-5	2	2	0	0	...	
5-6.5	2	2	0	0	...	
6.5-8	2	2	0	0	Rock at 7m (hole abandoned - stiffening up)	



Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 Of 1	Bore Hole: B6 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- Surface FEATURE Linked to BH47?	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	2	2	0	0	LOOSE FILL (SURFACE FEATURE?) to 7m	
2-3.5	2	2	0	0	...	
3.5-5	2	2	0	0	...	
5-6.5	2	2	0	0	...	
6.5-8	2	2	0	0	Rock at 7m (hole abandoned - stiffening up)	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B7 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- FEATURE	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	2	2	0	0	BIG AREA OF FILL to 10.5m LARGE PIT	
2-3.5	2	2	0	0	...	
3.5-5	2	2	0	0	...	
5-6.5	2	2	0	0	...	
6.5-8	2	2	0	0	...	
8-9.5	2	2	0	0	...	
9.5-11	2	2	0	0	ROCK at 10.5m	
11-12.5	3	4	0	0	...	
12.5-14	3	4	0	0	...	
14-15.5	3	4	0	0	...	

Logged By....SD.....

Date: 26/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B8 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- AREA OF FILL	Sum'y
0-0.5	2	3	0	0	Tarmac then SOIL/FILL	
0.5-2	2	2	5	5	FILL	
2-3.5	2	2	5	5	FILL	
3.5-5	3	4	5	5	Grades into clay slate ROCK at 4.3m (down hole)	
5-6.5	3	4	5	5	"Cocoa" coloured returns (chippy/slightly weathered) to end of hole.	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	



Logged By....SD.....

Date: 26/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B9 Azimuth: 164° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- STOPING	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	2	5	5	...	
2-3.5	3	2	5	5	Grades into clay slate ROCK at 2.5m (down hole)	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	FILLED VOID AT 6.2m (down hole)	
6.5-8	2	2int	0	0	FILLED VOID 2.9m wide (down hole)	
8-9.5	2	2int	0	0	ROCK at 9.1m	
9.5-11	3	4	0	0	...	

Logged By....SD

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: B10 Azimuth: 254° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED VOID</b>	Sum'y
0-0.5	3	2	5	5	Tarmac then SOIL/FILL	
0.5-2	3	2	5	5	...	
2-3.5	3	2	5	5	ROCK at 3m (weathered clay slates)	
3.5-5	3	4	5	5	Chippy/pale returns	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	<b>Filled VOID at 6m</b>	
8-9.5	3	4	5	5	<b>ROCK at 8.5m (pillar)</b>	
9.5-11	3	4	5	5	<b>FILLED VOID AT 9.7m</b>	
11-12.5	3	4	5	5	ROCK at 11.7m to end of hole	

Logged By....SD.....

Date: 25/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B11 Azimuth: 75° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	Grades into clay slate ROCK at 2.0m (down hole)	
2-3.5	3	3	5	5	...	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	10cm crack (hanging wall failing?) Flush not lost. This could be a very soft clay joint.	
9.5-11	3	4	5	5	...	



Logged By....SD.....

Date: 25/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B12 Azimuth: 254° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	...	
2-3.5	3	3	5	5	Grades into clay slate ROCK at 3.5m (down hole)	
3.5-5	3	4	5	5	Red returns	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	"Cocoa" coloured returns (chippy/slightly weathered) to end of hole.	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	
14-15.5	3	4	5	5	...	
15.5-17	3	4	5	5	...	
17-18.5	3	4	5	5	...	

Logged By....SD.....

Date: 26/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B13 Azimuth: 254° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	...	
2-3.5	3	3	5	5	Grades into clay slate ROCK at 3.5m (down hole)	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	"Cocoa" coloured returns (chippy/slightly weathered) to end of hole.	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	
14-15.5	3	4	5	5	...	
15.5-17	3	4	5	5	...	
17-18.5	3	4	5	5	...	

Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B14 Azimuth: 75° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED SHAFT</b>	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	ROCK at 2m (weathered clay slates)	
2-3.5	3	3	5	5	...	
3.5-5	2	0	0	0	<b>FILLED SHAFT AT 3.9m</b>	
5-6.5	2	0	0	0	<b>FILLED SHAFT 2.9m at 45 deg</b>	
6.5-8	3	4	0	0	ROCK at 6.8m,	



Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B15 Azimuth: 254° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	Rock at 1.7m (down hole) to end of hole.	
2-3.5	3	3	5	5	(possible area of fill at the top or soft patch below)	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	

Logged By....SD

Date: 25/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B16 Azimuth: 254° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	ROCK at 2m (weathered clay slates) to end of hole.	
2-3.5	3	3	5	5	...	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	

Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B17 Azimuth: 344° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	Rock at 2m (down hole) to end of hole.	
2-3.5	3	3	5	5	...	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	
14-15.5	3	4	5	5	...	
15.5-17	3	4	5	5	...	
17-18.5	3	4	5	5	...	



Logged By....SD.....

Date: 06/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B18 Azimuth: 344° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	Rock at 3m (down hole) to end of hole.	
2-3.5	3	3	5	5	...	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	
14-15.5	3	4	5	5	...	
15.5-17	3	4	5	5	...	
17-18.5	3	4	5	5	...	

Logged By....SD.....

Date: 06/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B19 Azimuth: 344° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	Rock at 2m (down hole) to end of hole.	
2-3.5	3	3	5	5	...	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	
14-15.5	3	4	5	5	...	
15.5-17	3	4	5	5	...	
17-18.5	3	4	5	5	...	

Logged By....SD.....

Date: 06/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B20 Azimuth: 344° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	...	
2-3.5	3	3	5	5	Rock at 3m (down hole) to end of hole.	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	
14-15.5	3	4	5	5	...	
15.5-17	3	4	5	5	...	



Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B21 Azimuth: 344° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	...	
2-3.5	3	3	5	5	Rock at 3m (down hole) to end of hole.	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	

Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B22 Azimuth: 344° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	Rock at 1.7m (down hole) to end of hole.	
2-3.5	3	3	5	5	...	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	
14-15.5	3	4	5	5	...	
15.5-17	3	4	5	5	...	

Logged By....SD.....

Date: 06/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B23 Azimuth: 344° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-0.5	3	3	0	0	Tarmac then SOIL/FILL	
0.5-2	3	3	5	5	...	
2-3.5	3	3	5	5	Rock at 3m (down hole) to end of hole.	
3.5-5	3	4	5	5	...	
5-6.5	3	4	5	5	...	
6.5-8	3	4	5	5	...	
8-9.5	3	4	5	5	...	
9.5-11	3	4	5	5	...	
11-12.5	3	4	5	5	...	
12.5-14	3	4	5	5	...	



Logged By....SD.....

Date: 04/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: B24 Azimuth: 75° Inclination: 45°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- Filled surface feature and stoping	Sum'y
0-0.5	2	3	5	0	Tarmac then SOIL/FILL	
0.5-2	2	2	5	5	Very loose FILL	
2-3.5	2	2	0	0	<b>FILLED FEATURE</b>	
3.5-5	2	2	0	0	...	
5-6.5	3	4	0	0	ROCK at 6m for 1.5m	
6.5-8	2	2	0	0	2m wide <b>FILLED VOID</b> at 7-8.5m (down hole)	
8-9.5	3	4	0	0	ROCK at 8.5m	

Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: C1 Azimuth: 164° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1	3	2	5	5	Tarmac and then soil/fill.	
1-2.5	3	2	5	5	...	
2.5-4	3	2	5	5	Rock at 3.3m weathered chippy mudstone	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	3	4	5	5	...	
10-11.5	3	4	5	5	...	
11.5-13	3	4	5	5	...	

Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: C2 Azimuth: 164° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED FEATURE</b>	Sum'y
0-1	3	2	0	0	Tarmac and then soil/FILL	
1-2.5	3	2	0	0	...	
2.5-4	3	2	5	5	<b>FILLED FEATURE BECOMES LOOSER AT DEPTH</b>	
4-5.5	2	2	2	2	...	
5.5-7	2	2	2	2	...	
7-8.5	2	2	0	0	Rock at 8m	
8.5-10	2	2	0	0	...	



Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C3 Azimuth: 164° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED SHAFT</b>	Sum'y
0-1	3	2	0	0	Tarmac and then soil/fill.	
1-2.5	3	2	0	0	...	
2.5-4	3	2	5	5	Rock at 3.3m weathered chippy mudstone	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	<b>FILLED SHAFT at 8m to 11m</b>	
8.5-10	1	2int	0	0	<b>SHAFT</b>	
10-11.5	1	2int	0	0	<b>SHAFT</b>	
11.5-13	3	4	0	0	Rock	

Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C4 Azimuth: 164° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>SHAFT</b>	Sum'y
0-1	3	3	0	0	Tarmac and then soil/fill.	
1-2.5	3	3	0	0	Stiff fill/weathered shattered Rock	
2.5-4	3	4	5	5	Rock at 3m weathered chippy mudstone	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	<b>FILLED SHAFT at 8m</b>	
8.5-10	1	4	5	0	<b>FILLED SHAFT to 9.8m</b>	
10-11.5	3	4	5	0	Rock	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C5 Azimuth: 164° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- FILLED VOID	Sum'y
0-1	3	2	0	0	Tarmac and then soil/fill.	
1-2.5	3	2	0	0	Rock at 2.3m weathered chippy mudstone	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	3	4	5	5	...	
10-11.5	3	2	0	0	FILLED FEATURE FROM 9.5-11m	
11.5-13	3	4	0	0	FILLED FEATURE/Rock	
13-14.5	3	4	0	0	Rock	



Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C6 Azimuth: 164° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- FILLED VOID	Sum'y
0-1	3	2	2	2	Tarmac and then soil/fill.	
1-2.5	2	2	0	0	...	
2.5-4	2	2	0	0	Rock at 3.3m weathered chippy mudstone	
4-5.5	4	4	5	5	...	
5.5-7	4	4	5	5	Crack (drill string dropped - flush and returns present)	
7-8.5	4	4	5	5	...	
8.5-10	2	4	5	5	FILLED VOID AT 9.7m to 11.1m	
10-11.5	4	2	0	0	Rock at 11.1M	

Logged By....SD.....

Date: 02/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: C7 Azimuth: 164° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments: -Tip material present to 4m	Sum'y
0-1	3	2	2	2	Tarmac and then soil/fill.	
1-2.5	2	2	2	2	TIP material	
2.5-4	2	2	2	2	Weathered Rock about 4m Lost cuttings into tip material	
4-5.5	2	2	2	0	...	
5.5-7	4	4	0	0	...	
7-8.5	4	4	0	0	Hole abandoned, jamming up.	

Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: C8 Azimuth: 75° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1	3	3	0	0	Tarmac and then soil/fill.	
1-2.5	3	3	0	0	Rock at 2.3m weathered chippy mudstone to end of hole	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	3	4	5	5	...	
10-11.5	3	4	5	5	...	



Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C9 Azimuth: 164° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- FILLED VOID	Sum'y
0-1	3	2	5	5	Tarmac and then soil/fill.	
1-2.5	3	2	5	5	Rock at 2.3m weathered chippy mudstone	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	2	2int	0	0	FILLED VOID (5m down hole)	
10-11.5	2	2int	0	0	FILLED VOID and 0.5m pillar at end of rod	
11.5-13	2	2	0	0	FILLED VOID	
13-14.5	2	2	0	0	Rock at 14m	

Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C10 Azimuth: 244° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED VOID</b>	Sum'y
0-1	3	2	5	5	Tarmac and then soil/fill.	
1-2.5	3	2	5	5	Rock at 2.5m weathered chippy mudstone	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	<b>FILLED VOID</b> AT 8.3m	
8.5-10	2	2	0	0	<b>FILLED VOID</b> to 9.7m (total 1.4m)	
10-11.5	3	4	0	0	Rock	

Logged By....SD.....

Date: 06/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: C11 Azimuth: 244° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- FILLED SHAFT	Sum'y
0-1	3	2	0	0	Tarmac and then soil/fill.	
1-2.5	2	2	0	0	Rock at 2.3m weathered chippy mudstone	
2.5-4	2	2	5	5	...	
4-5.5	2	2	5	5	Shaft at 4.9m FILLED	
5.5-7	1	1	0	0	SHAFT	
7-8.5	1	1	0	0	SHAFT	
8.5-10	1	1	0	0	Rock at 9.2	



Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C12 Azimuth: 75° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- SHAFT	Sum'y
0-1	3	3	0	0	Tarmac and then soil/fill.	
1-2.5	3	3	0	0	Rock at 2.3m	
2.5-4	3	4	0	0	3.9m SHAFT	
4-5.5	2	1	0	0	SHAFT	
5.5-7	1	1	0	0	END OF SHAFT 6.8m (total downhole width 2.9m)	
7-8.5	3	4	0	0	Rock at 6.8m	

Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site	Sheet:  1 of 1	Bore Hole: C13 Azimuth: 75° Inclination: 60°
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Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- GAP BETWEEN SHAFTS	Sum'y
0-1	3	3	0	0	Tarmac and then soil/fill.	
1-2.5	3	3	0	0	Rock at 2.3m weathered chippy mudstone to end of hole	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	3	4	5	5	...	
10-11.5	3	4	5	5	...	

Logged By....SD.....

Date: 07/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C14 Azimuth: 244° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- FILLED VOID	Sum'y
0-1	3	2	0	0	Tarmac and then soil/fill.	
1-2.5	3	2	0	0	Rock at 2.3m weathered chippy mudstone	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	FILLED SHAFT at 6.6m to 9.1m	
7-8.5	2	0	0	0	...	
8.5-10	2	0	0	0	Rock at 9.1m	



Logged By....SD.....

Date: 25/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C15 Azimuth: 75° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>FILLED FEATURE</b>	Sum'y
0-1	3	3	0	0	Tarmac and then soil/fill.	
1-2.5	3	2	0	0	<b>FILL</b>	
2.5-4	3	3	0	0	...	
4-5.5	2	2	0	0	...	
5.5-7	2	2	0	0	Rock at 6.8m weathered chippy mudstone to end of hole	
7-8.5	3	4	0	0	...	

Logged By....SD.....

Date: 07/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: C16 Azimuth: 244° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1	3	2	5	5	Tarmac and then soil/fill.	
1-2.5	3	2	5	5	Rock at 2.3m weathered chippy mudstone to end of hole	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	3	4	5	5	...	

Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: C17 Azimuth: 75° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1	3	3	0	0	Tarmac and then soil/fill.	
1-2.5	3	3	0	0	Becomes stiffer	
2.5-4	3	4	5	5	Rock at 3m. Weathered chippy mudstone to end of hole	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	3	4	5	5	...	

Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C18 Azimuth: 75° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- FILL to 5m	Sum'y
0-1	3	3	0	0	Tarmac and then soil/fill.	
1-2.5	3	3	0	0	FILL to 5m	
2.5-4	3	2	5	5	...	
4-5.5	3	4	5	5	Rock at 5m weathered chippy mudstone to end of hole	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	3	4	5	5	...	
10-11.5	3	4	5	5	...	



Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C19 Azimuth: 75° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- <b>LOOSE FILL</b>	Sum'y
0-1	2	3	5	5	Tarmac and then soil/fill.	
1-2.5	2	2	5	5	<b>LOOSE FILL</b>	
2.5-4	1	1	0	0	...	
4-5.5	2	1	0	0	...	
5.5-7	2	1	0	0	Rock at 6.2m	
7-8.5	3	4	0	0	...	

Logged By....SD.....

Date: 01/05/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: C20 Azimuth: 75° Inclination: 60°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:-	Sum'y
0-1	2	3	5	5	Tarmac and then soil/fill.	
1-2.5	2	2	5	5	LOOSE FILL	
2.5-4	1	1	0	0	...	
4-5.5	2	1	0	0	...	
5.5-7	2	1	0	0	Rock at 6.2m	
7-8.5	3	4	0	0	...	

Logged By....SD.....

Date: 26/04/20 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: D1 Azimuth: 75° Inclination: 75°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- FILLED VOID	Sum'y
0-1	2	3	5	5	Tarmac and then soil/fill.	
1-2.5	2	2	5	5	Weathered Rock/shattered material	
2.5-4	2	2	5	5	...	
4-5.5	3	4	5	5	MUCH LOOSER FILLED VOID AT 5.2m	
5.5-7	0	0	0	0	...	
7-8.5	0	0	0	0	...	
8.5-10	3	4	0	0	Rock at 9.2M	
10-11.5	3	4	0	0	...	

Logged By....SD.....

Date: 25/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet:  1 of 1	Bore Hole: D2 Azimuth: 75° Inclination: 75°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- SHAFT	Sum'y
0-1	3	2	5	5	Tarmac and then soil/fill.	
1-2.5	3	2	5	5	Rock at 2.3m weathered chippy mudstone	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	...	
7-8.5	3	4	5	5	...	
8.5-10	3	4	5	5	SHAFT STARTS AT 8.8m	
10-11.5	1	2	0	0	...	
11.5-13	1	2	0	0	...	
13-14.5	1	2	0	0	...	
14.5-16	1	2	0	0	...	
16-17.5	1	2	0	0	...	
17.5-19	3	4	0	0	Rock STARTS AT 18m	



Logged By....SD.....

Date: 25/04/2020 Client: Lian Doble Job: Tennis Court Site					Sheet: 1 of 1	Bore Hole: D3 Azimuth: 75° Inclination: 75°
Depth DH (m)	Ptrn	Hamr	Flsh	Rtrn	Comments:- SHAFT	Sum'y
0-1	3	2	5	5	Tarmac and then soil/fill.	
1-2.5	3	2	5	5	Rock at 2.3m weathered chippy mudstone	
2.5-4	3	4	5	5	...	
4-5.5	3	4	5	5	...	
5.5-7	3	4	5	5	FILLED VOID 6.8m to 11m	
7-8.5	2	2	0	5	...	
8.5-10	2	2	0	0	...	
10-11.5	2	2	0	0	Rock at 11m	
11.5-13	3	4	0	0	...	
13-14.5	3	4	0	0	...	