

## **8.1 Statistical analysis of the excavation experiment results**

In Chapter 8.1, the results from the excavation experiments have been subjected to statistical analyses, both T-Tests and One-Way ANOVA tests. These results are displayed in Table 8.1.1 – Table 8.1.43 and Graph 8.1.1 – Graph 8.1.3.

*Material evidence found*

**Table 8.1.1 Material evidence found: Stratigraphic Excavation versus Control Excavation**

Material evidence found	Stratigraphic	Control
	8	7
7	7	
6	4	
8	6	
6	4	
4	8	
5	9	
4	4	
7	5	
9	6	
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.4</b>	<b>6</b>
<b>Standard deviation:</b>	<b>1.71</b>	<b>1.76</b>
<b>T-Test P Value:</b>	<b>0.61316</b>	

**Table 8.1.2 Material evidence found: Demirant Excavation versus Control Excavation**

Material evidence found	Demirant	Control
	6	7
8	7	
8	4	
5	6	
8	4	
8	8	
7	9	
8	4	
4	5	
4	6	
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.6</b>	<b>6</b>
<b>Standard deviation:</b>	<b>1.71</b>	<b>1.76</b>
<b>T-Test P Value:</b>	<b>0.45028</b>	

**Table 8.1.3 Material evidence found: Quadrant Excavation versus Control Excavation**

<b>Material evidence found</b>	<b>Quadrant</b>	<b>Control</b>
	7	7
	8	7
	8	4
	8	6
	4	4
	6	8
	4	9
	5	4
	6	5
	8	6
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.4</b>	<b>6</b>
<b>Standard deviation:</b>	<b>1.65</b>	<b>1.76</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.60652</b>	

**Table 8.1.4 Material evidence found: Arbitrary Excavation versus Control Excavation**

<b>Material evidence identified:</b>	<b>Arbitrary</b>	<b>Control</b>
	2	7
	6	7
	6	4
	7	6
	6	4
	3	8
	5	9
	5	4
	3	5
	3	6
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>4.6</b>	<b>6</b>
<b>Standard deviation:</b>	<b>1.71</b>	<b>1.76</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.08852</b>	

**Table 8.1.5 Material evidence found: Stratigraphic Excavation versus Demirant Excavation**

Material evidence found	Stratigraphic	Demirant
	8	6
	7	8
	6	8
	8	5
	6	8
	4	8
	5	7
	4	8
	7	4
	9	4
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.4</b>	<b>6.6</b>
<b>Standard deviation:</b>	<b>1.71</b>	<b>1.71</b>
<b>T-Test P Value:</b>	<b>0.79697</b>	

**Table 8.1.6 Material evidence found: Stratigraphic Excavation versus Quadrant Excavation**

Material evidence found	Stratigraphic	Quadrant
	8	7
	7	8
	6	8
	8	8
	6	4
	4	6
	5	4
	4	5
	7	6
	9	8
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.4</b>	<b>6.4</b>
<b>Standard deviation:</b>	<b>1.71</b>	<b>1.65</b>
<b>T-Test P Value:</b>	<b>1.00000</b>	

**Table 8.1.7 Material evidence found: Stratigraphic Excavation versus Arbitrary Excavation**

Material evidence found	Stratigraphic	Arbitrary
		8
	7	6
	6	6
	8	7
	6	6
	4	3
	5	5
	4	5
	7	3
	9	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.4</b>	<b>4.6</b>
<b>Standard deviation:</b>	<b>1.71</b>	<b>1.71</b>
<b>T-Test P Value:</b>	<b>0.03038</b>	

**Table 8.1.8 Material evidence found: Demirant Excavation versus Quadrant Excavation**

Material evidence found	Demirant	Quadrant
		6
	8	8
	8	8
	5	8
	8	4
	8	6
	7	4
	8	5
	4	6
	4	8
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.6</b>	<b>6.4</b>
<b>Standard deviation:</b>	<b>1.71</b>	<b>1.65</b>
<b>T-Test P Value:</b>	<b>0.79311</b>	

**Table 8.1.9 Material evidence found: Demirant Excavation versus Arbitrary Excavation**

Material evidence found	Demirant	Arbitrary
	6	2
	8	6
	8	6
	5	7
	8	6
	8	3
	7	5
	8	5
	4	3
	4	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.6</b>	<b>4.6</b>
<b>Standard deviation:</b>	<b>1.71</b>	<b>1.71</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.01768</b>	

**Table 8.1.10 Material evidence found: Quadrant Excavation versus Arbitrary Excavation**

Material evidence found	Quadrant	Arbitrary
	7	2
	8	6
	8	6
	8	7
	4	6
	6	3
	4	5
	5	5
	6	3
	8	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.4</b>	<b>4.6</b>
<b>Standard deviation:</b>	<b>1.65</b>	<b>1.71</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.02766</b>	

*Material evidence found in situ*

**Table 8.1.11 Material evidence found in situ: Stratigraphic Excavation versus Control Excavation**

Material evidence found in situ	Stratigraphic	Control
	7	3
	5	5
	6	4
	7	5
	4	4
	4	5
	3	6
	4	4
	7	4
	5	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.2</b>	<b>4.3</b>
<b>Standard deviation:</b>	<b>1.48</b>	<b>0.95</b>
<b>T-Test P Value:</b>	<b>0.12213</b>	

**Table 8.1.12 Material evidence found in situ: Demirant Excavation versus Control Excavation**

Material evidence found in situ	Demirant	Control
	6	3
	6	5
	6	4
	5	5
	6	4
	8	5
	6	6
	8	4
	4	4
	3	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.8</b>	<b>4.3</b>
<b>Standard deviation:</b>	<b>1.55</b>	<b>0.95</b>
<b>T-Test P Value:</b>	<b>0.01768</b>	

**Table 8.1.13 Material evidence found in situ: Quadrant Excavation versus Control Excavation**

Material evidence found in situ	Quadrant	Control
	7	3
	7	5
	6	4
	8	5
	3	4
	5	5
	4	6
	5	4
	6	4
8	3	
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.9</b>	<b>4.3</b>
<b>Standard deviation:</b>	<b>1.66</b>	<b>0.95</b>
<b>T-Test P Value:</b>	<b>0.01656</b>	

**Table 8.1.14 Material evidence found in situ: Arbitrary Excavation versus Control Excavation**

Material evidence identified in situ	Arbitrary	Control
	1	3
	6	5
	6	4
	7	5
	6	4
	3	5
	5	6
	4	4
	3	4
3	3	
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>4.4</b>	<b>4.3</b>
<b>Standard deviation:</b>	<b>1.90</b>	<b>0.95</b>
<b>T-Test P Value:</b>	<b>0.88315</b>	



**Table 8.1.15 Material evidence found in situ: Stratigraphic Excavation versus Demirant Excavation**

Material evidence found in situ	Stratigraphic	Demirant
		7
	5	6
	6	6
	7	5
	4	6
	4	8
	3	6
	4	8
	7	4
	5	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.2</b>	<b>5.8</b>
<b>Standard deviation:</b>	<b>1.48</b>	<b>1.55</b>
<b>T-Test P Value:</b>	<b>0.38688</b>	

**Table 8.1.16 Material evidence found in situ: Stratigraphic Excavation versus Quadrant Excavation**

Material evidence found in situ	Stratigraphic	Quadrant
		7
	5	7
	6	6
	7	8
	4	3
	4	5
	3	4
	4	5
	7	6
	5	8
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.2</b>	<b>5.9</b>
<b>Standard deviation:</b>	<b>1.48</b>	<b>1.66</b>
<b>T-Test P Value:</b>	<b>0.33269</b>	

**Table 8.1.17 Material evidence found in situ: Stratigraphic Excavation versus Arbitrary Excavation**

Material evidence found in situ	Stratigraphic	Arbitrary
	7	1
	5	6
	6	6
	7	7
	4	6
	4	3
	3	5
	4	4
	7	3
	5	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.2</b>	<b>4.4</b>
<b>Standard deviation:</b>	<b>1.48</b>	<b>1.90</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.30651</b>	

**Table 8.1.18 Material evidence found in situ: Demirant Excavation versus Quadrant Excavation**

Material evidence found in situ	Demirant	Quadrant
	6	7
	6	7
	6	6
	5	8
	6	3
	8	5
	6	4
	8	5
	4	6
	3	8
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.8</b>	<b>5.9</b>
<b>Standard deviation:</b>	<b>1.55</b>	<b>1.66</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.89090</b>	

**Table 8.1.19 Material evidence found in situ: Demirant Excavation versus Arbitrary Excavation**

Material evidence found in situ	Demirant	Arbitrary
	6	1
	6	6
	6	6
	5	7
	6	6
	8	3
	6	5
	8	4
	4	3
	3	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.8</b>	<b>4.4</b>
<b>Standard deviation:</b>	<b>1.55</b>	<b>1.90</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.08744</b>	

**Table 8.1.20 Material evidence found in situ: Quadrant Excavation versus Arbitrary Excavation**

Material evidence found in situ	Quadrant	Arbitrary
	7	1
	7	6
	6	6
	8	7
	3	6
	5	3
	4	5
	5	4
	6	3
	8	3
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>5.9</b>	<b>4.4</b>
<b>Standard deviation:</b>	<b>1.66</b>	<b>1.90</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.07641</b>	

*Contexts identified*

**Table 8.1.21 Contexts identified: Stratigraphic Excavation versus Control Excavation**

<b>Contexts identified</b>	<b>Stratigraphic</b>	<b>Control</b>
	10	7
	10	8
	9	7
	10	8
	10	8
	8	7
	8	7
	10	7
	10	7
	10	8
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.5</b>	<b>7.4</b>
<b>Standard deviation:</b>	<b>0.85</b>	<b>0.52</b>
<b>T-Test P Value: (2.89x10<sup>-6</sup>)</b>	<b>2.89778E-06 0.00000289</b>	

**Table 8.1.22 Contexts identified: Demirant Excavation versus Control Excavation**

<b>Contexts identified</b>	<b>Demirant</b>	<b>Control</b>
	10	7
	10	8
	10	7
	9	8
	10	8
	10	7
	10	7
	10	7
	10	7
	9	8
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.8</b>	<b>7.4</b>
<b>Standard deviation:</b>	<b>0.42</b>	<b>0.52</b>
<b>T-Test P Value: (1.17x10<sup>-9</sup>)</b>	<b>1.17279E-09 0.000000001</b>	

**Table 8.1.23 Contexts identified: Quadrant Excavation versus Control Excavation**

Contexts identified	Quadrant	Control
	10	7
	10	8
	8	7
	10	8
	10	8
	10	7
	10	7
	10	7
	10	7
	10	8
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.8</b>	<b>7.4</b>
<b>Standard deviation:</b>	<b>0.63</b>	<b>0.52</b>
<b>T-Test P Value:</b> ( $2.71 \times 10^{-8}$ )	<b>2.71702E-08</b> <b>0.00000003</b>	

**Table 8.1.24 Contexts identified: Arbitrary Excavation versus Control Excavation**

Contexts identified	Arbitrary	Control
	6	7
	7	8
	7	7
	7	8
	7	8
	7	7
	7	7
	7	7
	7	7
	7	8
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>6.9</b>	<b>7.4</b>
<b>Standard deviation:</b>	<b>0.32</b>	<b>0.52</b>
<b>T-Test P Value:</b>	<b>0.01768</b>	

**Table 8.1.25 Contexts identified: Stratigraphic Excavation versus Demirant Excavation**

<b>Contexts identified</b>	<b>Stratigraphic</b>	<b>Demirant</b>
	10	10
	10	10
	9	10
	10	9
	10	10
	8	10
	8	10
	10	10
	10	10
	10	9
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.5</b>	<b>9.8</b>
<b>Standard deviation:</b>	<b>0.85</b>	<b>0.42</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.33056</b>	

**Table 8.1.26 Contexts identified: Stratigraphic Excavation versus Quadrant Excavation**

<b>Contexts identified</b>	<b>Stratigraphic</b>	<b>Quadrant</b>
	10	10
	10	10
	9	8
	10	10
	10	10
	8	10
	8	10
	10	10
	10	10
	10	10
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.5</b>	<b>9.8</b>
<b>Standard deviation:</b>	<b>0.85</b>	<b>0.63</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.38232</b>	

**Table 8.1.27 Contexts identified: Stratigraphic Excavation versus Arbitrary Excavation**

<b>Contexts identified</b>	<b>Stratigraphic</b>	<b>Arbitrary</b>
	10	6
	10	7
	9	7
	10	7
	10	7
	8	7
	8	7
	10	7
	10	7
	10	7
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.5</b>	<b>6.9</b>
<b>Standard deviation:</b>	<b>0.85</b>	<b>0.32</b>
<b>T-Test P Value:</b> <b>(3.94x10<sup>-8</sup>)</b>	<b>3.94124E-08</b> <b>0.00000004</b>	

**Table 8.1.28 Contexts identified: Demirant Excavation versus Quadrant Excavation**

<b>Contexts identified</b>	<b>Demirant</b>	<b>Quadrant</b>
	10	10
	10	10
	10	8
	9	10
	10	10
	10	10
	10	10
	10	10
	10	10
	9	10
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.8</b>	<b>9.8</b>
<b>Standard deviation:</b>	<b>0.42</b>	<b>0.63</b>
<b>T-Test P Value:</b>	<b>1.00000</b>	

**Table 8.1.29 Contexts identified: Demirant Excavation versus Arbitrary Excavation**

Contexts identified	Demirant	Arbitrary
	10	6
	10	7
	10	7
	9	7
	10	7
	10	7
	10	7
	10	7
	10	7
	9	7
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.8</b>	<b>6.9</b>
<b>Standard deviation:</b>	<b>0.42</b>	<b>0.32</b>
<b>T-Test P Value:</b> <b>(1.05x10<sup>-12</sup>)</b>	<b>1.05042E-12</b> <b>0.000000000001</b>	

**Table 8.1.30 Contexts identified: Quadrant Excavation versus Arbitrary Excavation**

Contexts identified	Quadrant	Arbitrary
	10	6
	10	7
	8	7
	10	7
	10	7
	10	7
	10	7
	10	7
	10	7
	10	7
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.8</b>	<b>6.9</b>
<b>Standard deviation:</b>	<b>0.63</b>	<b>0.32</b>
<b>T-Test P Value:</b> <b>(1.43x10<sup>-10</sup>)</b>	<b>1.43117E-10</b> <b>0.0000000001</b>	



*Overall results*

**Table 8.1.31 Overall results: Stratigraphic Excavation versus Control Excavation**

<b>Overall</b>	<b>Stratigraphic</b>	<b>Control</b>
	22	12
	20	16
	17	9
	22	14
	18	11
	12	14
	13	15
	14	9
	20	11
	24	14
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.2</b>	<b>12.5</b>
<b>Standard deviation:</b>	<b>4.13</b>	<b>2.46</b>
<b>T-Test P Value:</b>	<b>0.00147</b>	

**Table 8.1.32 Overall results: Demirant Excavation versus Control Excavation**

<b>Overall</b>	<b>Demirant</b>	<b>Control</b>
	18	12
	22	16
	22	9
	15	14
	22	11
	22	14
	20	15
	22	9
	14	11
	12	14
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.9</b>	<b>12.5</b>
<b>Standard deviation:</b>	<b>3.90</b>	<b>2.46</b>
<b>T-Test P Value:</b>	<b>0.00035</b>	

**Table 8.1.33 Overall results: Quadrant Excavation versus Control Excavation**

<b>Overall</b>	<b>Quadrant</b>	<b>Control</b>
	20	12
	22	16
	16	9
	22	14
	14	11
	18	14
	14	15
	16	9
	18	11
	22	14
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.2</b>	<b>12.5</b>
<b>Standard deviation:</b>	<b>3.19</b>	<b>2.46</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.00029</b>	

**Table 8.1.34 Overall results: Arbitrary Excavation versus Control Excavation**

<b>Overall</b>	<b>Arbitrary</b>	<b>Control</b>
	5	12
	12	16
	11	9
	12	14
	11	11
	9	14
	10	15
	10	9
	8	11
	7	14
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>9.5</b>	<b>12.5</b>
<b>Standard deviation:</b>	<b>2.27</b>	<b>2.46</b>
<b>T-Test <i>P</i> Value:</b>	<b>0.01105</b>	

**Table 8.1.35 Overall results: Stratigraphic Excavation versus Demirant Excavation**

<b>Overall</b>	<b>Stratigraphic</b>	<b>Demirant</b>
	22	18
	20	22
	17	22
	22	15
	18	22
	12	22
	13	20
	14	22
	20	14
	24	12
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.2</b>	<b>18.9</b>
<b>Standard deviation:</b>	<b>4.13</b>	<b>3.90</b>
<b>T-Test P Value:</b>	<b>0.70139</b>	

**Table 8.1.36 Overall results: Stratigraphic Excavation versus Quadrant Excavation**

<b>Overall</b>	<b>Stratigraphic</b>	<b>Quadrant</b>
	22	20
	20	22
	17	16
	22	22
	18	14
	12	18
	13	14
	14	16
	20	18
	24	22
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.2</b>	<b>18.2</b>
<b>Standard deviation:</b>	<b>4.13</b>	<b>3.19</b>
<b>T-Test P Value:</b>	<b>1.00000</b>	

**Table 8.1.37 Overall results: Stratigraphic Excavation versus Arbitrary Excavation**

<b>Overall</b>	<b>Stratigraphic</b>	<b>Arbitrary</b>
	22	5
	20	12
	17	11
	22	12
	18	11
	12	9
	13	10
	14	10
	20	8
	24	7
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.2</b>	<b>9.5</b>
<b>Standard deviation:</b>	<b>4.13</b>	<b>2.27</b>
<b>T-Test P Value:</b> <b>1.58x10<sup>-5</sup></b>	<b>1.5839E-05</b> <b>0.0000158</b>	

**Table 8.1.38 Overall results: Demirant Excavation versus Quadrant Excavation**

<b>Overall</b>	<b>Demirant</b>	<b>Quadrant</b>
	18	20
	22	22
	22	16
	15	22
	22	14
	22	18
	20	14
	22	16
	14	18
	12	22
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.9</b>	<b>18.2</b>
<b>Standard deviation:</b>	<b>3.90</b>	<b>3.19</b>
<b>T-Test P Value:</b>	<b>0.66566</b>	

**Table 8.1.39 Overall results: Demirant Excavation versus Arbitrary Excavation**

<b>Overall</b>	<b>Demirant</b>	<b>Arbitrary</b>
	18	5
	22	12
	22	11
	15	12
	22	11
	22	9
	20	10
	22	10
	14	8
	12	7
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.9</b>	<b>9.5</b>
<b>Standard deviation:</b>	<b>3.90</b>	<b>2.27</b>
<b>T-Test P Value:</b>	<b>0.000003</b>	

**Table 8.1.40 Overall results: Quadrant Excavation versus Arbitrary Excavation**

<b>Overall</b>	<b>Quadrant</b>	<b>Arbitrary</b>
	20	5
	22	12
	16	11
	22	12
	14	11
	18	9
	14	10
	16	10
	18	8
	22	7
<b>Sample total:</b>	<b>10</b>	<b>10</b>
<b>Average:</b>	<b>18.2</b>	<b>9.5</b>
<b>Standard deviation:</b>	<b>3.19</b>	<b>2.27</b>
<b>T-Test P Value:</b> <b>(1.48x10<sup>-6</sup>)</b>	<b>1.48571E-06</b> <b>0.00000148</b>	

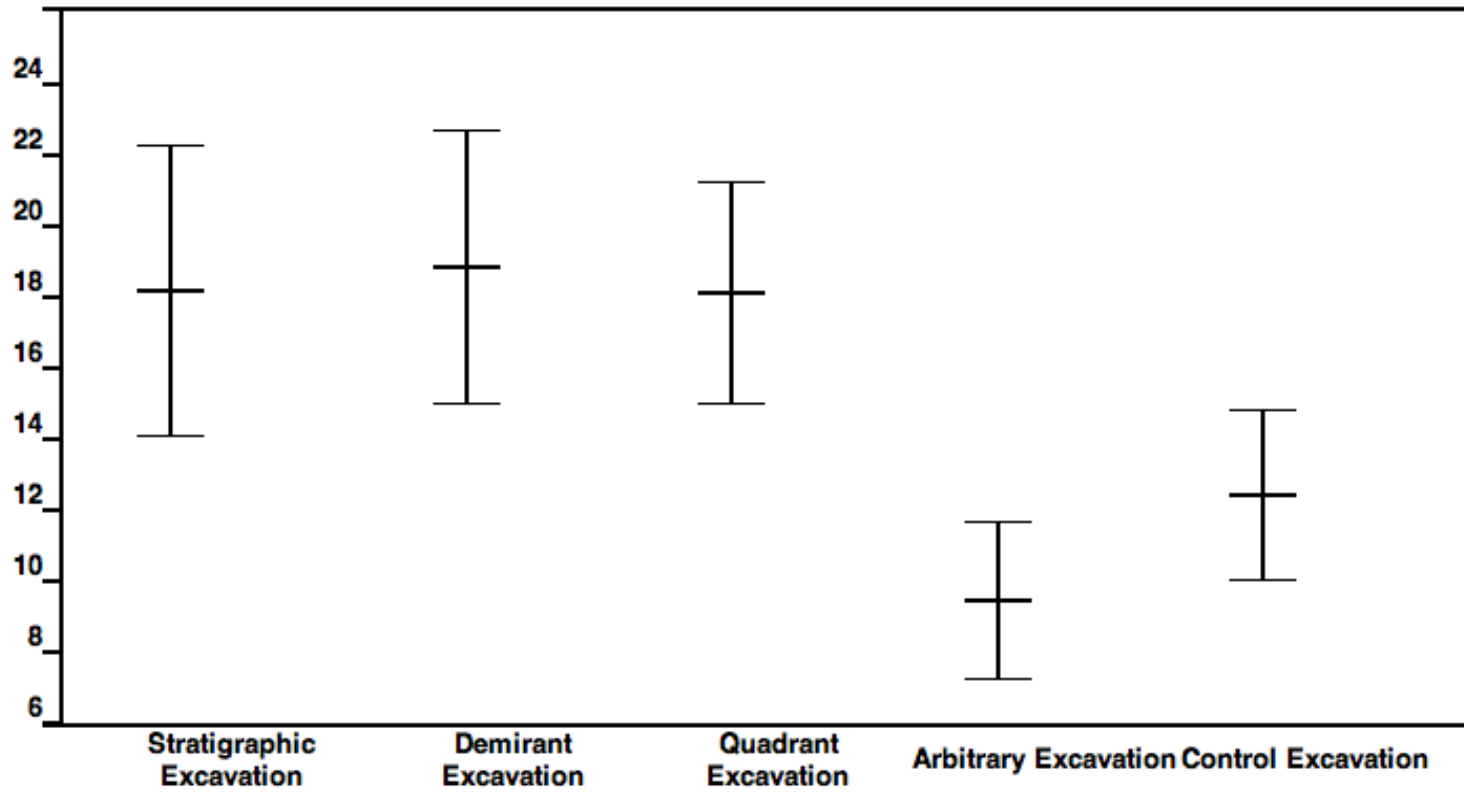
**Table 8.1.41 ANOVA test: Overall results**

**Overall Results**

	<b>Stratigraphic Excavation</b>	<b>Demirant Excavation</b>	<b>Quadrant Excavation</b>	<b>Arbitrary Excavation</b>	<b>Control Excavation</b>
1	22	18	20	5	12
2	20	22	22	12	16
3	17	22	16	11	9
4	22	15	22	12	14
5	18	22	14	11	11
6	12	22	18	9	14
7	13	20	14	10	15
8	14	22	16	10	9
9	20	14	18	8	11
10	24	12	22	7	14
<b>n</b>	10	10	10	10	10
$\bar{X}$	18.200	18.900	18.200	9.500	12.500
<b>s</b>	4.131	3.900	3.190	2.273	2.461
$\bar{X}_{ave}$	15.460				

<b>source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>P-value</b>
treatments	4	711.320	177.830	16.5646	0.0000
error	45	483.100	10.736		
total	49	1194.420			

**Graph 8.1.1 ANOVA test: Overall results**



**Table 8.1.42 ANOVA test: Overall results**

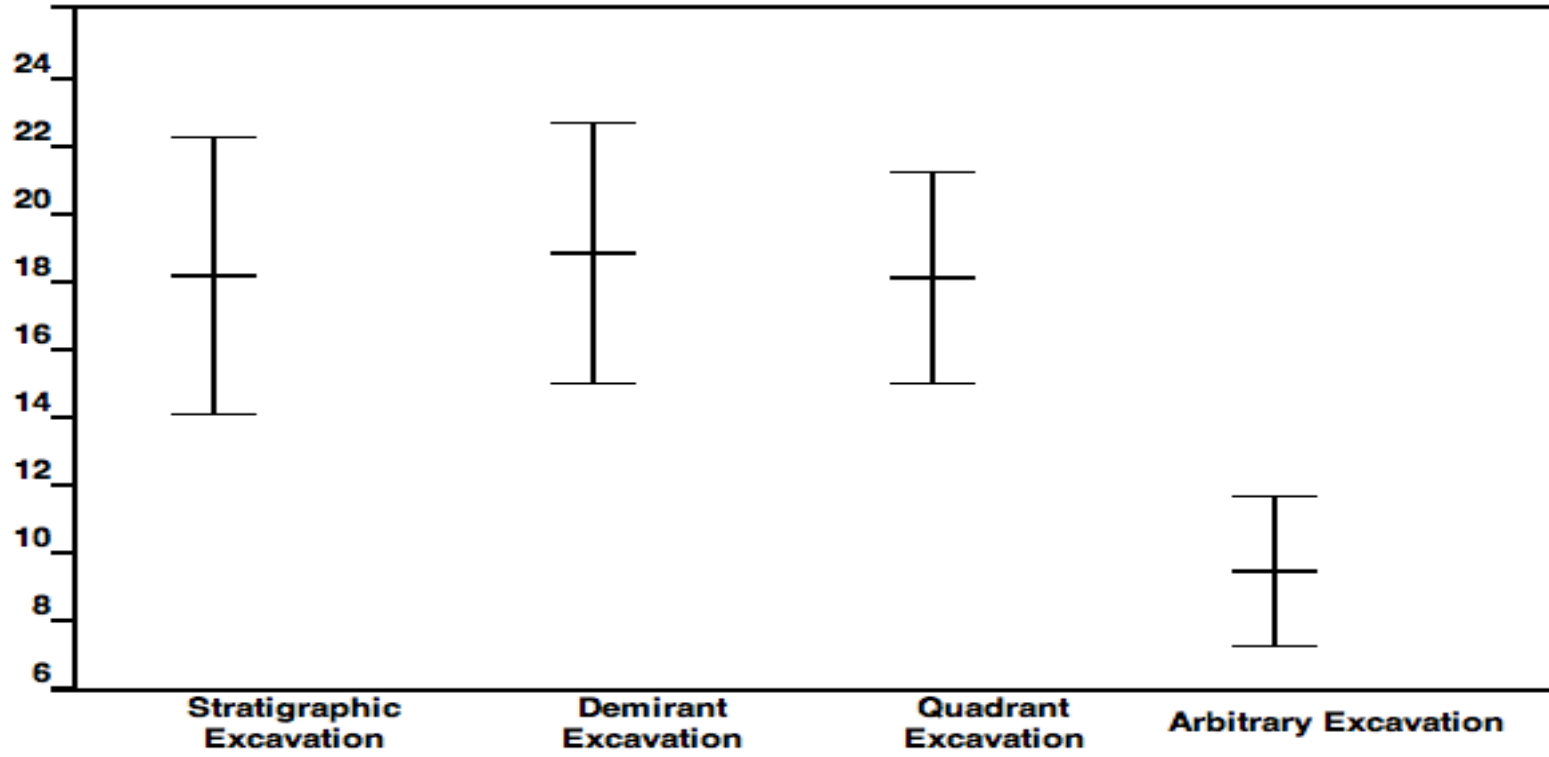
Overall Results				
	Stratigraphic Excavation	Demirant Excavation	Quadrant Excavation	Arbitrary Excavation
1	22	18	20	5
2	20	22	22	12
3	17	22	16	11
4	22	15	22	12
5	18	22	14	11
6	12	22	18	9
7	13	20	14	10
8	14	22	16	10
9	20	14	18	8
10	24	12	22	7
<b>n</b>	10	10	10	10
$\bar{X}$	18.200	18.900	18.200	9.500
<b>s</b>	4.131	3.900	3.190	2.273
$\bar{X}_{ave}$	16.200			

source	df	SS	MS	F	P-value
treatments	3	601.800	200.600	16.8493	0.0000
error	36	428.600	11.906		
total	39	1030.400			



Graph 8.1.2 ANOVA test: Overall results



**Table 8.1.43 ANOVA test: Overall results**

Overall Results			
	Stratigraphic Excavation	Demirant Excavation	Quadrant Excavation
1	22	18	20
2	20	22	22
3	17	22	16
4	22	15	22
5	18	22	14
6	12	22	18
7	13	20	14
8	14	22	16
9	20	14	18
10	24	12	22
n	10	10	10
$\bar{X}$	18.200	18.900	18.200
s	4.131	3.900	3.190
$\bar{X}_{ave}$	18.433		

source	df	SS	MS	F	P-value
treatments	2	3.267	1.633	0.1154	0.8914
error	27	382.100	14.152		
total	29	385.367			

Graph 8.1.3 ANOVA test: Overall results

