

# Drilling Log

| Project Name <b>Cessna</b>                    |                                       |                    |                                          |                                      |                   | Boring No. <b>0-17</b>                         |               |
|-----------------------------------------------|---------------------------------------|--------------------|------------------------------------------|--------------------------------------|-------------------|------------------------------------------------|---------------|
| Project No. <b>85-141-4-001</b>               |                                       |                    |                                          |                                      |                   | Page <b>1</b> of <b>5</b>                      |               |
| Ground Elevation <b>1296.89</b>               |                                       |                    | Location <b>See Boring Location Plan</b> |                                      |                   | Total Footage <b>77.0'</b>                     |               |
| Drilling Type                                 | Hole Size                             | Overburden Footage | Bedrock Footage                          | No. of Samples                       | No. Core Boxes    | Depth To Water                                 | Date Measured |
| <b>Wash Bore</b>                              | <b>5"</b>                             | <b>75.0'</b>       | <b>0</b>                                 | <b>0</b>                             | <b>0</b>          | <b>See Remarks</b>                             |               |
| Drilling Co. <b>Layne Western Company Inc</b> |                                       |                    |                                          | Driller (s) <b>R Crowl B Blank</b>   |                   |                                                |               |
| Drilling Rig. <b>ATV Mounted CME 750</b>      |                                       |                    |                                          | Type of Penetration Test <b>None</b> |                   |                                                |               |
| Date <b>4.1.87</b>                            |                                       | To <b>4.1.87</b>   |                                          | Field Observer (s) <b>M Eversman</b> |                   |                                                |               |
| Depth                                         | Description                           | Class.             | Blow Count                               | Recov.                               | Sample or Box No. | Remarks                                        |               |
| 1                                             | Dark Brown clay. Silty Mod. Hard.     |                    |                                          |                                      |                   | Begin drilling @ 2:15pm                        |               |
| 2                                             | Red Brown clay. Silty. Hard           |                    |                                          |                                      |                   |                                                |               |
| 3                                             |                                       |                    |                                          |                                      |                   |                                                |               |
| 4                                             |                                       |                    |                                          |                                      |                   |                                                |               |
| 5                                             |                                       |                    |                                          |                                      |                   |                                                |               |
| 6                                             |                                       |                    |                                          |                                      |                   |                                                |               |
| 7                                             |                                       |                    |                                          |                                      |                   |                                                |               |
| 8                                             |                                       |                    |                                          |                                      |                   |                                                |               |
| 9                                             |                                       |                    |                                          |                                      |                   |                                                |               |
| 10                                            | Reddish Brown clay. Silty. Sandy Hard |                    |                                          |                                      |                   | No water level in hole due to drilling method. |               |
| 11                                            |                                       |                    |                                          |                                      |                   |                                                |               |
| 12                                            |                                       |                    |                                          |                                      |                   |                                                |               |
| 13                                            |                                       |                    |                                          |                                      |                   |                                                |               |
| 14                                            |                                       |                    |                                          |                                      |                   |                                                |               |

# Drilling Log, continued

| Project Name <u>Cessna</u>      |                                           |              |            |                    |  | Boring No. <u>D-17</u>    |            |
|---------------------------------|-------------------------------------------|--------------|------------|--------------------|--|---------------------------|------------|
| Project No. <u>85-141-4-001</u> |                                           |              |            |                    |  | Page <u>2</u> of <u>5</u> |            |
|                                 |                                           |              |            |                    |  | Date <u>4.1.87</u>        |            |
| Depth                           | Description                               | Log or Class | Blow Count | Core Recov. & Loss |  | Box or Sample No.         | Remarks    |
| 15                              | Red Brown clay. Silty. sandy.<br>Mod Hard |              |            |                    |  |                           |            |
| 16                              |                                           |              |            |                    |  |                           |            |
| 17                              |                                           |              |            |                    |  |                           |            |
| 18                              | Sand increasing                           |              |            |                    |  |                           |            |
| 19                              |                                           |              |            |                    |  |                           |            |
| 20                              | Gray Clay. Silty. Soft.                   |              |            |                    |  |                           |            |
| 21                              |                                           |              |            |                    |  |                           |            |
| 22                              |                                           |              |            |                    |  |                           |            |
| 23                              |                                           |              |            |                    |  |                           |            |
| 24                              |                                           |              |            |                    |  |                           |            |
| 25                              |                                           |              |            |                    |  |                           |            |
| 26                              |                                           |              |            |                    |  |                           |            |
| 27                              |                                           |              |            |                    |  |                           |            |
| 28                              | Lt Gray Clay. Silty. Sandy                |              |            |                    |  |                           |            |
| 29                              |                                           |              |            |                    |  |                           |            |
| 30                              | Sand                                      |              |            |                    |  |                           | Sand @ 30' |
| 31                              |                                           |              |            |                    |  |                           |            |

# Drilling Log, continued

| Project Name <u>Cessna</u>      |                                      |              |            |                    |  | Boring No. <u>D-17</u>    |         |
|---------------------------------|--------------------------------------|--------------|------------|--------------------|--|---------------------------|---------|
| Project No. <u>85-141-4-001</u> |                                      |              |            |                    |  | Page <u>3</u> of <u>5</u> |         |
|                                 |                                      |              |            |                    |  | Date <u>4.1.87</u>        |         |
| Depth                           | Description                          | Log or Class | Blow Count | Core Recov. & Loss |  | Box or Sample No.         | Remarks |
| 32                              | Sand. Coarse. Poorly Sorted          |              |            |                    |  |                           |         |
| 33                              |                                      |              |            |                    |  |                           |         |
| 34                              |                                      |              |            |                    |  |                           |         |
| 35                              |                                      |              |            |                    |  |                           |         |
| 36                              |                                      |              |            |                    |  |                           |         |
| 37                              |                                      |              |            |                    |  |                           |         |
| 38                              | Sand. Coarse Grained. Poorly Sorted. |              |            |                    |  |                           |         |
| 39                              |                                      |              |            |                    |  |                           |         |
| 40                              |                                      |              |            |                    |  |                           |         |
| 41                              |                                      |              |            |                    |  |                           |         |
| 42                              |                                      |              |            |                    |  |                           |         |
| 43                              |                                      |              |            |                    |  |                           |         |
| 44                              | Yellow Clay. Mod. Stiff              |              |            |                    |  |                           |         |
| 45                              |                                      |              |            |                    |  |                           |         |
| 46                              |                                      |              |            |                    |  |                           |         |
| 47                              |                                      |              |            |                    |  |                           |         |
| 48                              |                                      |              |            |                    |  |                           |         |

# Drilling Log, continued

| Project Name <u>Cessna</u>      |                                   |              |            |                    |  | Boring No. <u>D-17</u>    |         |
|---------------------------------|-----------------------------------|--------------|------------|--------------------|--|---------------------------|---------|
| Project No. <u>85-141-4-001</u> |                                   |              |            |                    |  | Page <u>4</u> of <u>5</u> |         |
|                                 |                                   |              |            |                    |  | Date <u>4.1.87</u>        |         |
| Depth                           | Description                       | Log or Class | Blow Count | Core Recov. & Loss |  | Box or Sample No.         | Remarks |
| 49                              | Yellow clay. Silty. Trace of sand |              |            |                    |  |                           |         |
| 50                              |                                   |              |            |                    |  |                           |         |
| 51                              |                                   |              |            |                    |  |                           |         |
| 52                              |                                   |              |            |                    |  |                           |         |
| 53                              |                                   |              |            |                    |  |                           |         |
| 54                              | as above.                         |              |            |                    |  |                           |         |
| 55                              |                                   |              |            |                    |  |                           |         |
| 56                              |                                   |              |            |                    |  |                           |         |
| 57                              |                                   |              |            |                    |  |                           |         |
| 58                              |                                   |              |            |                    |  |                           |         |
| 59                              | Yellow clay. Silty. Sandy         |              |            |                    |  |                           |         |
| 60                              |                                   |              |            |                    |  |                           |         |
| 61                              |                                   |              |            |                    |  |                           |         |
| 62                              |                                   |              |            |                    |  |                           |         |
| 63                              |                                   |              |            |                    |  |                           |         |
| 64                              |                                   |              |            |                    |  |                           |         |
| 65                              |                                   |              |            |                    |  |                           |         |

# Drilling Log, continued

| Project Name <u>Cessna</u>      |                                                |              |            |                    |  | Boring No. <u>D-17</u>    |                                                 |
|---------------------------------|------------------------------------------------|--------------|------------|--------------------|--|---------------------------|-------------------------------------------------|
| Project No. <u>85-141-4-001</u> |                                                |              |            |                    |  | Page <u>5</u> of <u>5</u> |                                                 |
|                                 |                                                |              |            |                    |  | Date <u>4.1.87</u>        |                                                 |
| Depth                           | Description                                    | Log or Class | Blow Count | Core Recov. & Loss |  | Box or Sample No.         | Remarks                                         |
| 66                              |                                                |              |            |                    |  |                           |                                                 |
| 67                              |                                                |              |            |                    |  |                           |                                                 |
| 68                              |                                                |              |            |                    |  |                           |                                                 |
| 69                              |                                                |              |            |                    |  |                           |                                                 |
| 70                              | Sand. Fine to Medium Grained<br>Poorly Sorted. |              |            |                    |  |                           |                                                 |
| 71                              |                                                |              |            |                    |  |                           |                                                 |
| 72                              |                                                |              |            |                    |  |                           | Set 10' 2" $\phi$<br>screen to 77'              |
| 73                              |                                                |              |            |                    |  |                           | Gravel pack<br>to 49'                           |
| 74                              |                                                |              |            |                    |  |                           | Bentonite seal to<br>1.                         |
| 75                              |                                                |              |            |                    |  |                           | Grout to surface                                |
| 76                              | Sand. as above.                                |              |            |                    |  |                           | Completed drilling<br>@ 5:30pm                  |
| 77                              |                                                |              |            |                    |  |                           | Completed setting<br>monitoring well<br>@ 7:00p |
| 78                              | Total Depth 77.0'                              |              |            |                    |  |                           |                                                 |

- LEGEND**
- ▲ SHALLOW WELL (APPROX. 30-45ft.)
  - INTERMEDIATE WELL (APPROX. 75ft.)
  - DEEP WELL (APPROX. 100-120ft.)
  - PRODUCTION WELL
  - TEMPORARY BORING



Figure No. I-1  
MONITORING WELL  
LOCATIONS

BUTTS & McDONNELL  
ENGINEERS - ARCHITECTS - CONSULTANTS