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| PROJECT NUMBER 160492.SA.03 | WELL NUMBER MW-102 | SHEET 1 OF 1 |
| WELL COMPLETION DIAGRAM | | |

PROJECT : Long Term Operational Areas - Memphis Depot

LOCATION : Memphis, Tennessee

DRILLING CONTRACTOR : Tri-State Testing Services, Inc.

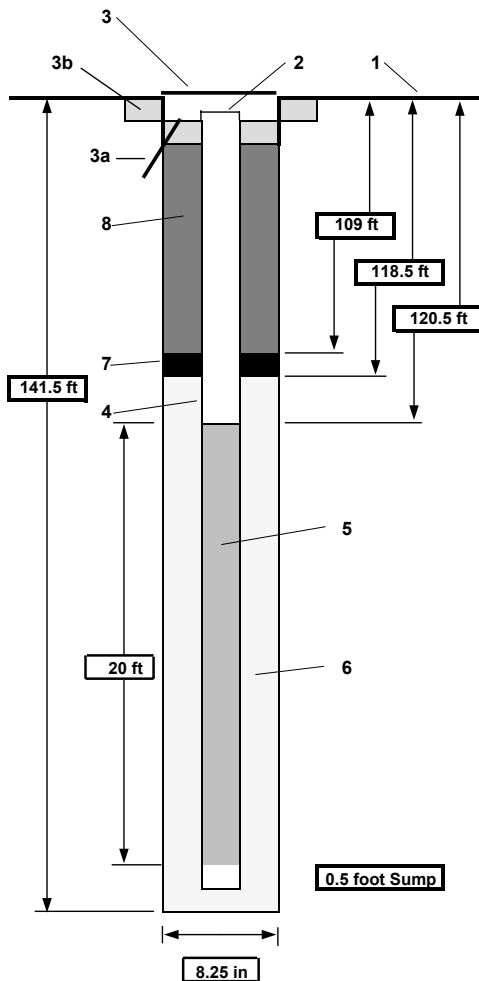
DRILLING METHOD AND EQUIPMENT USED : Hollow Stem Auger 4.25 inch ID with CME Sampler

WATER LEVELS : 110.78 feet BTOC (11/2001)

START : 11/14/2001

END: 11/14/2001

LOGGER : Jay Parker (Jacobs)



| | |
|--|---|
| 1- Ground elevation at well | 312.07 feet MSL |
| 2- Top of casing elevation | 311.40 feet MSL |
| 3- Wellhead protection cover type | Flush mount vault |
| a) drain tube? | no |
| b) concrete pad dimensions | 3 ft x 3 ft x 6 in |
| 4- Dia./type of well casing | 2-inch Sch. 40 PVC |
| 5- Type/slot size of screen | 2-inch 0.010 slotted PVC |
| 6- Type screen filter | #2 filter sand |
| a) Quantity used | bags |
| 7- Type of seal | Bentonite chips |
| a) Quantity used | bags |
| 8- Grout | |
| a) Grout mix used | 90% Portland Grout, 10% bentonite powder |
| b) Method of placement | Tremie Method |
| c) Vol. of well casing grout | |
| Development method | Surge & pump with an electrical, centrifugal, in-line pump. |
| Development time | 2 hour |
| Estimated purge volume | 48 gallons |
| Comments | Total Depth (BGS) = 143 feet Completed based on LTOA workplan (2001) specifications. |
| Final field parameters collected during well development (11/20/2001): | |
| pH = | 6.02 |
| conductivity = | 0.406 mS/cm |
| temperature = | 19.68 °C |
| Dissolved Oxygen = | 5.54 mg/l |
| Turbidity = | 319 NTU |